Notes.—Also known as Common Puffin and, in Old World literature, as the Puffin. Fratercula arctica and F. corniculata constitute a superspecies (Mayr and Short 1970).

Fratercula corniculata (Naumann). Horned Puffin.

Mormon corniculata Naumann, 1821, Isis von Oken, col. 782. (Kamchatka.)

Habitat.—Mostly pelagic; nests on rocky islands in cliff crevices and among boulders, rarely in ground burrows.

Distribution.—*Breeds* on islands and along coasts of the Chukchi and Bering seas from the Diomede Islands and Cape Lisburne south to the Aleutian Islands, and along the Pacific coast of western North America from the Alaska Peninsula and south-coastal Alaska south to British Columbia (Queen Charlotte Islands, and probably elsewhere along the coast); and in Asia from northeastern Siberia (Kolyuchin Bay) south to the Commander Islands, Kamchatka, Sakhalin, and the northern Kuril Islands. Nonbreeding birds occur in late spring and summer south along the Pacific coast of North America to southern California, and north in Siberia to Wrangel and Herald islands.

Winters from the Bering Sea and Aleutians south, at least casually, to the northwestern Hawaiian Islands (from Kure east to Laysan), and off North America (rarely) to southern California; and in Asia from northeastern Siberia south to Japan.

Accidental in Mackenzie (Basil Bay); a sight report for Baja California.

Notes.—See comments under *F. arctica*.

Fratercula cirrhata (Pallas). Tufted Puffin.

Alca cirrhata Pallas, 1769, Spic. Zool. 1(5): 7, pl. i; pl. v, figs. 1-3. (in Mari inter Kamtschatcam et Americam Archipelagumque Kurilum = Bering Sea.)

Habitat.—Primarily pelagic; nests on islands and coastal slopes in ground burrows, sometimes under boulders and piles of rocks, occasionally under dense vegetation.

Distribution.—Breeds along the Pacific coast of North America from the Diomede Islands and Cape Thompson south through islands of the Bering Sea (including the Pribilofs) to the Aleutians, east to the Alaska Peninsula, Kodiak Island, and southeastern Alaska, and south to southern California (to Santa Barbara County, off San Miguel Island); and in eastern Asia from the Kolyuchin Islands and East Cape south to Kamchatka, the Commander and Kuril islands, Sea of Okhotsk, Sakhalin, and northern Japan.

Winters offshore from southern Alaska and Kamchatka south through the breeding range to central (rarely southern) California and southern Japan.

Accidental in the Hawaiian Islands (Laysan) and Maine.

Notes.—Formerly placed in the monotypic genus Lunda.

Family **Incertae Sedis**Family **PTEROCLIDIDAE**: Sandgrouse

Notes.—The relationships of the Pteroclididae are so controversial that we leave them *incertae sedis*. Maclean (1967, 1969) and Fjeldså (1976) placed them in the Charadriiformes, a position supported by recent molecular analyses (Sibley and Ahlquist 1990). Others (Olson 1970, Strauch 1978) retain them in their traditional position in the Columbiformes.

Genus PTEROCLES Temminck

Pterocles Temminck, 1815, Pig. Gall. 3: 238, 712. Type, by subsequent designation (G. R. Gray, 1840), Tetrao alchata Linnaeus.

Pterocles exustus Temminck. Chestnut-bellied Sandgrouse.

Pterocles exustus Temminck, 1825, Planches Color., livr. 60, pls. 354, 360. (west coast of Africa, Egypt and Nubia = Senegal.)

Habitat.—Dry keawe scrub forest, rocky grasslands, and pastures at low and moderate elevations; in native range, deserts and arid scrub.

Distribution.—Resident across northern Africa (south of the Sahara) from Senegal east to Somalia and Kenya, and from Arabia and Syria east to Baluchistan and India.

Introduced and established in the Hawaiian Islands (North Kona district of Hawaii, since 1961).

Order **COLUMBIFORMES**: Pigeons and Doves

Family COLUMBIDAE: Pigeons and Doves

Genus COLUMBA Linnaeus

Columba Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 162. Type, by subsequent designation (Vigors, 1825), Columba oenas Linnaeus.

Patagioenas Reichenbach, 1853, Handb. Spec. Ornithol., Die Vögel, pt. 3 (1852), p. xxv. Type, by monotypy, Columba leucocephala Linnaeus.

Lithoenas Reichenbach, 1853, Handb. Spec. Ornithol., Die Vögel, pt. 3 (1852), p. xxv. Type, by monotypy, Columba livia "Linnaeus" = Gmelin.

Chloroenas Reichenbach, 1853, Handb. Spec. Ornithol., Die Vögel, pt. 3 (1852), p. xxv. Type, by monotypy, Columba monilis Vigors = Columba fasciata Say.

Lepidoenas Reichenbach, 1853, Handb. Spec. Ornithol., Die Vögel, pt. 3 (1852), p. xxv. Type, by monotypy, Columba speciosa Gmelin.

Enoenas [subgenus] Salvadori, 1893, Cat. Birds Brit. Mus. 21: 248. Type, by subsequent designation (Ridgway, 1916), *Columba nigrirostris* Sclater.

Notes.—For modern usage of *Patagioenas* and *Oenoenas* as genera distinct from *Columba*, see Johnston (1962); for contrary opinion, see Corbin (1968).

Columba livia Gmelin, Rock Dove.

Columba domestica & livia Gmelin, 1789, Syst. Nat. 1(2): 769. (No locality given = southern Europe.)

Habitat.—In the wild state along rocky seacoasts or inland in gorges, river valleys, caves, and desert oases, nesting on cliff ledges or in holes and fissures; feral birds in the Western Hemisphere occasionally in natural habitats, more abundantly near human settlement, especially in cities.

Distribution.—Resident in Eurasia from the Faeroe Islands, southern Scandinavia, Russia, western Siberia, Manchuria, and northern China south through the British Isles, western Europe, and the Mediterranean region to the eastern Atlantic islands, northern Africa, Arabia, Iran, India, Sri Lanka, and Burma.

Introduced and established widely throughout the world, including the Hawaiian Islands, most of North America (from the central parts of the Canadian provinces south), in the Revillagigedo Islands (Socorro Island), and the West Indies.

Notes.—Also known as Rock Pigeon or Domestic Pigeon; established, feral populations are sometimes called Feral Pigeon or Common Pigeon. Oberholser (1974) used the name *Lithoenas domestica*; see Banks and Browning (1995).

Columba cayennensis Bonnaterre. Pale-vented Pigeon.

Columba cayennensis Bonnaterre, 1792, Tabl. Encycl. Méth., Ornithol. 1(51): 234. Based on "Le Pigeon Ramier de Cayenne" Holandre, Abrege Hist. Nat. 2: 214. (Cayenne.)

Habitat.—Gallery Forest, River-edge Forest, Edge of Tropical Lowland Forest, and Secondary Forest, lowland pine savanna (0-800 m; Tropical Zone, in South America to Temperate Zone).

Distribution.—Resident from extreme southeastern Veracruz, Tabasco, the Yucatan Peninsula, and northern Chiapas south on the Gulf-Caribbean slope to Nicaragua, on both slopes of Costa Rica and Panama, and in South America from Colombia, Venezuela, Tobago,

Trinidad, and the Guianas south, west of the Andes to western Ecuador and east of the Andes to northern Argentina and southeastern Brazil.

Notes.—Also known as Rufous Pigeon.

Columba speciosa Gmelin. Scaled Pigeon.

Columba speciosa Gmelin, 1789, Syst. Nat. 1(2): 783. Based primarily on "Pigeon ramier, de Cayenne" Daubenton, Planches Enlum., pl. 213. (in Cayenna = Cayenne.)

Habitat.—Tropical Lowland Evergreen Forest, Montane Evergreen Forest, Gallery Forest, lowland pine savanna (0–1400 m; Tropical and lower Subtropical zones).

Distribution.—Resident from southern Veracruz and northern Oaxaca south on the Gulf-Caribbean slope of Middle America to Nicaragua, on both slopes of Costa Rica (absent from dry northwest) and Panama, and in South America from Colombia, Venezuela, Trinidad, and the Guianas south, west of the Andes to northwestern Peru, and east of the Andes (excluding most of Amazonia) to northern Argentina and southeastern Brazil.

Columba squamosa Bonnaterre. Scaly-naped Pigeon.

Columba squamosa Bonnaterre, 1792, Tabl. Encycl. Méth., Ornithol. 1, 1(51): 234. Based on "Le Pigeon Ramier de la Guadeloupe" Holandre, Abrege Hist. Nat. 2: 214. (Guadeloupe.)

Habitat.—Montane Evergreen Forest, Tropical Lowland Evergreen Forest (0-2500 m). Distribution.—Resident in the Greater Antilles (rare on Jamaica), Lesser Antilles (not recorded Anguilla, St. Barthélemy or Désirade), and islands off the north coast of Venezuela (Curaçao, Bonaire, Los Testigos, and Los Frailes, formerly also Aruba).

Casual in southern Florida (Key West).

Notes.—Also known as Red-necked Pigeon.

Columba leucocephala Linnaeus. White-crowned Pigeon.

Columba leucocephala Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 164. Based mainly on "The White-crown'd Pigeon" Catesby, Nat. Hist. Carolina 1: 25, pl. 25. (in America septentrionali = Bahama Islands.)

Habitat.—Mangrove Forest, Tropical Deciduous Forest, Tropical Lowland Evergreen Forest (0–2000 m).

Distribution.—Breeds in southern Florida (mangrove islets in the Florida Keys from Elliot to Marquesas keys, and throughout Florida Bay), Bahamas, Antilles (south to Barbuda and Antigua), Cayman Islands, islands of the western Caribbean Sea (Cozumel off Quintana Roo, cays off Belize, the Bay and Hog islands off Honduras, Providencia and Corn islands), and Caribbean Panama (Swan Cay, Escudo de Veraguas, and coast of Bocas del Toro, also San Blas Islands). Individuals from Florida Bay commonly forage on the mainland (southern Dade and Monroe counties).

Winters throughout most of the breeding range, regularly in southern peninsular Florida, the Florida Keys, and northern Bahamas, ranging in Middle America to coastal areas (recorded Quintana Roo, Belize, Honduras, and western Panama), and in the Lesser Antilles south to St. Lucia.

Casual on the mainland of southern Florida (north to Fort Pierce region); a sight report for southern Texas. A report from Oaxaca (Salina Cruz) is questionable (Binford 1989).

Columba flavirostris Wagler. Red-billed Pigeon.

Columba flavirostris Wagler, 1831, Isis von Oken, col. 519. (Mexico = Veracruz.)

Habitat.—Tropical Deciduous Forest, Gallery Forest (0-2100 m; Tropical and lower Subtropical zones).

Distribution.—Resident from central Sonora, southern Chihuahua, Durango, San Luis Potosí, Nuevo León, and southern Texas south through Middle America (including the Tres

Marías Islands, but absent from most of Caribbean slope from Honduras south) to central Costa Rica; northernmost populations are migratory southward.

Notes.—C. flavirostris and C. inornata appear to constitute a superspecies (Mayr and Short 1970).

Columba inornata Vigors. Plain Pigeon.

Columba inornata Vigors, 1827, Zool. J. 3: 446. (near Havana, Cuba.)

Habitat.—Tropical Lowland Evergreen Forest, Montane Evergreen Forest, Secondary Forest (0–2000 m).

Distribution.—Resident on Cuba, the Isle of Pines, Hispaniola (including Tortue Island), Jamaica, and Puerto Rico (where presently confined to vicinity of Cidra, west-central Puerto Rico).

Notes.—See comments under C. flavirostris.

Columba fasciata Say. Band-tailed Pigeon.

Columba fasciata Say, 1823, in Long, Exped. Rocky Mount. 2: 10 (note). (small tributary of the Platte = Plum Creek, near Castle Rock, Douglas County, Colorado.)

Habitat.—Temperate and mountain forests, primarily in oaks, less commonly in coniferous forest, and locally in lowlands, foraging also in cultivated areas; increasingly common in wooded suburbs in Pacific coastal region (Subtropical and Temperate zones).

Distribution.—Breeds [fasciata group] from southwestern British Columbia south (primarily in mountains) through Washington, Oregon, California, and western Nevada to southern Baja California; from southern Nevada, Arizona, central Utah, north-central Colorado, New Mexico, and western Texas south through the mountains of Mexico, Guatemala, El Salvador, and Honduras to (at least formerly) north-central Nicaragua. Regular in summer (and probably breeding) north to southeastern Alaska (as far north as Mitkof Island and the Stikine River) and west-central British Columbia.

Winters [fasciata group] from western Washington, central California, central Arizona, central New Mexico (rarely), and western Texas southward through the breeding range, occurring widely in Mexico in foothills at lower elevations than in the breeding season, regularly north to southwestern British Columbia, rarely west to islands off the coast of California, and east to Nevada.

Resident [albilinea group] in the mountains of Costa Rica and western Panama (east to eastern Veraguas); and in South America in the mountains from Venezuela, Trinidad, and Colombia south to northwestern Argentina.

Casual [fasciata group] in western and northern Alaska (near Nome, upper Ikpikpuk River), and from Idaho, Montana, central Alberta, southern Saskatchewan, southern Manitoba, western and southern Ontario, New Hampshire, New Brunswick, Maine, and Nova Scotia south to Wyoming, western Missouri, Oklahoma, western Texas, Louisiana, Mississippi, Alabama, and Florida.

Notes.—Groups: C. fasciata [Band-tailed Pigeon] and C. albilinea Bonaparte, 1854 [White-necked Pigeon]. Columba fasciata, C. caribaea, and the South American C. araucana Lesson, 1827, may constitute a superspecies (Mayr and Short 1970).

Columba caribaea Jacquin. Ring-tailed Pigeon.

Columba (caribæa) Jacquin, 1784, Beytr. Ges. Vögel, p. 30. Based on "Pigeon à queue annelée de la Jamaique" Brisson, Ornithologie 1: 138. (Karibäische Inseln = Jamaica.)

Habitat.—Tropical Lowland Evergreen Forest, Montane Evergreen Forest (0–1500 m.) Distribution.—Resident on Jamaica.

Notes.—See comments under *C. fasciata*.

Columba subvinacea (Lawrence). Ruddy Pigeon.

Chloroenas subvinacea Lawrence, 1868, Ann. Lyc. Nat. Hist. N. Y. 9: 135. (Dota, Costa Rica.)

Habitat.—Tropical Lowland Evergreen Forest, River-edge Forest, Montane Evergreen Forest (0–1800 m; Tropical and Subtropical zones).

Distribution.—Resident [subvinacea group] in the mountains of Costa Rica and western Panama (east to Veraguas), and from northern and eastern Colombia, Venezuela, and the Guianas south, east of the Andes, to central Bolivia and Amazonian Brazil; and [berlepschi group] in eastern Panama (eastern Panamá province, San Blas, and eastern Darién) and western Colombia south to northwestern Peru.

Notes.—Wetmore (1968) suggested that the two groups represent distinct species, *C. subvinacea* [Ruddy Pigeon] and *C. berlepschi* Hartert, 1898 [Berlepsch's Pigeon]. See notes under *C. nigrirostris*.

Columba nigrirostris Sclater. Short-billed Pigeon.

Columba nigrirostris Sclater, 1859, Proc. Zool. Soc. London, p. 390. (In statu Oaxaca reipubl. Mexicanæ = probably Playa Vicente, Veracruz; Binford, 1989, Ornithol. Monogr. 43, p. 337.)

Habitat.—Tropical Lowland Evergreen Forest, Montane Evergreen Forest (0-1500 m; Tropical and lower Subtropical zones).

Distribution.—Resident from southern Veracruz, northern Oaxaca, Tabasco, eastern Chiapas, and southern Quintana Roo south on the Gulf-Caribbean slope of Central America to Costa Rica (including southwestern portion on the Pacific slope), Panama (both slopes), and northwestern Colombia (Chocó).

Notes.—Wetmore (1968) considered the unique type of *C. chiriquensis* (Ridgway, 1915) to be an immature *C. nigrirostris*, although Johnston (1962) considered it to be an example of *C. subvinacea*. *Columba nigrirostris* and *C. goodsoni* Hartert, 1902, appear to constitute a superspecies (Johnston 1962).

Genus STREPTOPELIA Bonaparte

Streptopelia Bonaparte, 1855, C. R. Acad. Sci. Paris 40: 17. Type, by subsequent designation (G. R. Gray, 1855), Columba risoria Linnaeus.

Streptopelia orientalis (Latham). Oriental Turtle-Dove.

Columba orientalis Latham, 1790, Index Ornithol., 2: 606. (China.)

Habitat.—Open forest and savanna.

Distribution.—Breeds in Asia from the Ural Mountains east to the Sea of Okhotsk and Japan, and south to southern Asia, and winters in the southern part of the breeding range.

Casual in Alaska in the Pribilof Islands (St. Paul, 23 June-18 July 1984, photograph; Gibson and Kessel 1992), at sea about 50 miles from the Pribilof Islands (individual came aboard a fishing vessel, about 20–26 July 1986, photograph; Gibson and Kessel 1992), and in the Aleutian Islands (Attu, 20 May-12 June 1989, photograph; 1989, Amer. Birds 43: 525; DeBenedictis 1991; Attu, 21 May—3 June 1996, Nat. Aud. Soc. Field Notes 50: 320). A report from British Columbia (Vancouver Island) may be an escape from captivity.

Notes.—Also known as Rufous Turtle-Dove.

Streptopelia risoria (Linnaeus). Ringed Turtle-Dove.

Columba risoria Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 165. (in India.)

Habitat.—Feral populations occur in open woodland and parks around human habitation; related species in the wild state inhabit arid country with trees and shrubs, often near human habitation.

Distribution.—Origin and native country uncertain; long domesticated and in captivity worldwide.

Introduced and established in west-central Florida (Pinellas County), the Bahamas (New Providence), Puerto Rico, and apparently also in eastern Texas (Houston region) and Alabama (Montgomery). Other North American populations (e.g., in Los Angeles) have failed to become established.

Notes.—Also known as Barbary Dove. This widely domesticated and locally introduced form is now deemed to be derived from the African *S. roseogrisea* (Sundevall, 1957) [African Collared-Dove] rather than *S. decaocto* (Goodwin 1983). Surviving North American populations may now be entirely human-supported and totally human-dependent. There is controversy whether the name *risoria* can be applied to any wild population at all (Sibley and Monroe 1990).

Streptopelia turtur (Linnaeus). European Turtle-Dove.

Columba Turtur Linnaeus, 1758, Syst. Nat., ed. 10, 1, p. 164. (in India, error = England.)

Habitat.—Open woodland, scrub, plains, and gardens.

Distribution.—Breeds from the British Isles and Europe south to northern Africa and southwestern Asia, and winters south to southwestern Africa.

Accidental in southern Florida (Lower Matecumbe Key, 9–11 April 1990, photograph; Hoffman et al. 1990). Some consider the origin of this individual uncertain; see DeBenedictis (1994b).

Streptopelia decaocto (Frivaldszky). Eurasian Collared-Dove.

Columba risoria L. var. decaocto Frivaldszky, 1838, K. Magyar Tudos Társág Evkönyvi 3(3) (1834–36): 183, pl. 8. (Turkey.)

Habitat.—Suburbs, parks, and farm groves; in Old World, a variety of habitats from open woodland to scrub and desert, as well as around human habitation.

Distribution.—Western Palearctic from the British Isles, southern Scandinavia, and western Russia south to southern Europe, Egypt, and southern Asia east to Burma and Sri Lanka; European populations represent a relatively recent expansion and may be the result of introductions.

Introduced and established in the Bahama Islands (New Providence, 1974), whence it has spread to other northern islands in the Bahamas (Grand Bahama, Abaco, Bimini, Eleuthera, Andros), to Cuba, to the Lesser Antilles (Montserrat, St. Kitts, Dominica, Guadeloupe), and to southern Florida (late 1970's, now common to abundant from the Tampa and Palm Beach areas south to Key West, breeding locally west to Destin in the Panhandle); also established locally in coastal Georgia, South Carolina, and southeastern Louisiana, occurring casually north to North Carolina (nesting 1995) and Pennsylvania, and west to southwestern Louisiana, Arkansas, and central and northwestern Texas (origin uncertain); a small population in southeastern Colorado is of uncertain origin. Also apparently spreading in Caribbean, with recent populations discovered in Cuba, Montserrat, and Dominica. Also introduced in Japan.

Notes.—For a discussion of the history of *S. decaocto* in North America, see Smith (1987). For distribution in West Indies, see Barre et al. (1996). *Streptopelia decaocto* and *S. bitorquata* (Temminck) 1810, of Indonesia and the Philippines, appear to constitute a superspecies (Goodwin 1983).

Streptopelia chinensis (Scopoli). Spotted Dove.

Columba (chinensis) Scopoli, 1786, Del Flor. Faun. Insubr., fasc. 2, p. 94. (China = Canton.)

Habitat.—Primarily suburban areas and cultivated lands around human habitation with groves of trees.

Distribution.—Resident from eastern Afghanistan, the Himalayas, and eastern China south to Sri Lanka, the Malay Peninsula, East Indies, and Philippines.

Introduced and established in the Hawaiian Islands (main islands from Kauai eastward); in southern California (primarily from Santa Barbara, where now rare, and Bakersfield south to San Diego and the Coachella Valley) and (probably) extreme northwestern Baja California (Tijuana area), casually to Imperial Valley; and in Mauritius, Sulawesi, Australia, New Zealand, and various islands of Polynesia. A small population may persist on St. Croix, Virgin Islands (introduced in 1964).

Genus GEOPELIA Swainson

Geopelia Swainson, 1837, Class. Birds 2: 348. Type, by monotypy, Geopelia lineata Mus. Carl. pl. 67 = Columba striata Linnaeus.

Geopelia striata (Linnaeus). Zebra Dove.

Columba striata Linnaeus, 1766, Syst. Nat. (ed. 12) 1: 282. Based on "La Tourterelle rayée des Indes" Brisson, Ornithologie 1: 109, and "The Transverse Striped or Barred Dove" Edwards 1: 16, pl. 16. (in India orientali = Java.)

Habitat.—Open country with trees and shrubby growth, parks, gardens, and cultivated areas, especially near human habitation.

Distribution.—Resident from the Malay Peninsula and Philippines south to the East Indies.

Introduced and established in the Hawaiian Islands (in 1922, now on all main islands from Kauai eastward).

Notes.—Also known as Barred Dove. *Geopelia placida* Gould, 1844 [Peaceful Dove] of Australia and *G. maugeus* (Temminck, 1811) [Barred Dove] of the Lesser Sunda Islands are often merged with *G. striata* (see Christidis and Boles 1994).

Genus ZENAIDA Bonaparte

Zenaida Bonaparte, 1838, Geogr. Comp. List, p. 41. Type, by tautonymy, Zenaida amabilis Bonaparte = Columba zenaida Bonaparte = Columba aurita Temminck.

Zenaidura Bonaparte, 1855, C. R. Acad. Sci. Paris 40: 96. Type, by original designation, Columba carolinensis Linnaeus = Columba macroura Linnaeus.

Melopelia Bonaparte, 1855, C. R. Acad. Sci. Paris 40: 98. Type, by subsequent designation (G. R. Gray, 1855), Columba meloda Tschudi = Columba asiatica Linnaeus.

Zenaida asiatica (Linnaeus). White-winged Dove.

Columba asiatica Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 163. Based on "The Brown Indian Dove" Edwards, Nat. Hist. Birds 2: 76, pl. 76. (in Indiis = Jamaica.)

Habitat.—Tropical Deciduous Forest, Gallery Forest, Riparian Thickets, Second-growth Scrub, Arid Lowland Scrub (0–2500 m; Tropical and Subtropical zones).

Distribution.—Breeds [asiatica group] in southeastern California, southern Nevada, and extreme southwestern Utah.

Resident [asiatica group] from central Arizona, central New Mexico, northern Chihuahua, western and central Texas, and (locally) southern Louisiana and southern Alabama south to Baja California, through most of Middle America (including Isla Tiburón off Sonora, the Tres Marías Islands off Nayarit, and Cozumel and Holbox islands off Quintana Roo) to Honduras, locally in the Pacific lowlands to northwestern Costa Rica (Guanacaste), in mangrove swamps of western Panama around the shores of Golfo de Parita from Herrera (lower Río Parita) to Coclé (Río Pocrí and Río Antón), in the southern Bahamas (north to Great Exuma and Long Island) and Greater Antilles (east to Puerto Rico), and on islands in the western Caribbean (Providencia, San Andrés); and [meloda group] along the Pacific coast of South America from southwestern Ecuador to northern Chile.

Winters [asiatica group] south to Costa Rica and islands in the Caribbean Sea.

Introduced [asiatica group] in central and southern Florida.

Casual [asiatica group] in northwestern North America north to southeastern Alaska (Skagway), British Columbia, Montana, and Colorado, in eastern North America from Minnesota, northern Ontario, New Brunswick, Maine, and Nova Scotia south to northern Texas, central Louisiana, and northern Florida, in the northern Bahamas (Grand Bahama, Acklin's Island), and in the Virgin Islands (St. Croix, St. John).

Notes.—Groups: Z. asiatica [White-winged Dove] and Z. meloda (Tschudi, 1843) [Pacific Dove].

Zenaida aurita (Temminck). Zenaida Dove.

Columba Aurita Temminck, 1809, Les Pigeons, livr. 6, Les Colombes, p. 60, pl. 25. (Martinique.)

Habitat.—Tropical Deciduous Forest, Arid Lowland Scrub, Second-growth Scrub (0–600 m; Tropical Zone).

Distribution.—Resident in the Florida Keys (formerly), Bahamas, Greater Antilles (east to Virgin Islands), Cayman Islands and Lesser Antilles; and along the north coast of the Yucatan Peninsula (Yucatán, Quintana Roo), including on Holbox, Cancun, Mujeres, and Cozumel islands. A specimen from Belize is of dubious authenticity (Barlow et al. 1969).

Casual in southern Florida (from Key West to Key Largo, with sight reports north to Osceola County).

Zenaida auriculata (Des Murs). Eared Dove.

Peristera auriculata Des Murs, 1847, in Gay, Hist. Fis. Pol. Chile, Zool. 1: 381, pl. 6. (central provinces of Chile.)

Habitat.—Second-growth Scrub, Arid Lowland Scrub, Arid Montane Scrub (0-3400 m; Tropical to Temperate zones).

Distribution.—Resident in the southern Lesser Antilles on Grenada and the Grenadines; and throughout most of South America from Colombia, Venezuela (including islands from the Netherlands Antilles east to Tobago and Trinidad) and the Guianas south to Tierra del Fuego.

Casual on St. Lucia and Martinique; accidental in the Falkland Islands and on South Georgia. An individual photographed in Panama (Coco Solo, Canal area) may have been an escape from captivity; also a sight report from Tocumen, Panamá Prov.

Notes.—Z. auriculata and Z. macroura constitute a superspecies (Mayr and Short 1970).

Zenaida macroura (Linnaeus). Mourning Dove.

Columba macroura Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 164. Based mainly on "The Long-tailed Dove" Edwards, Nat. Hist. Birds 1: 15, pl. 15. (in Canada, error = Cuba.)

Habitat.—Cultivated lands with scattered trees and bushes, open woodland, suburbs, and arid and desert country (generally near water) (Tropical to Temperate zones).

Distribution.—*Breeds* from central British Columbia (including Vancouver Island), central Alberta, central Saskatchewan, southern Manitoba, northern Minnesota, northern Wisconsin, northern Michigan, central Ontario, southern Quebec, Maine, New Brunswick, Prince Edward Island and Nova Scotia south to southern Baja California, Sonora (in Pacific lowlands), in the interior mountains and Central Plateau of Mexico to Oaxaca and Puebla, and to northern Tamaulipas (in the Caribbean lowlands), Texas, the Gulf coast, and southern Florida; in Bermuda, the Bahama Islands, and Greater Antilles (east to Puerto Rico and Culebra and Vieques islands); in Guadalupe, the Revillagigedo and Tres Marías islands off western Mexico; and in western Nicaragua, Costa Rica, and western Panama (east to western Panamá province), probably also elsewhere in northern Central America.

Winters primarily from northern California east across the central United States to Iowa, southern Michigan, southern Ontario, southwestern Quebec, New York, and New England (uncommonly to the northern limits of the breeding range), and south throughout the breeding range and over most of Middle America to central Panama.

Casual north to western and central Alaska (almost annually), southern Yukon, southern Mackenzie, northern Manitoba, northern Ontario, central Quebec, Labrador, Newfoundland, and Greenland, and to the Cayman Islands. Accidental on Clipperton Island, Colombia, and the British Isles.

Introduced and established in the Hawaiian Islands (on Hawaii in 1963, presently a small population in the North Kona region).

Notes.—See comments under Z. auriculata and Z. graysoni.

Zenaida graysoni (Lawrence). Socorro Dove.

Zenaidura graysoni (Baird MS) Lawrence, 1871, Ann. Lyc. Nat. Hist. N. Y. 10: 17. (Socorro Island, Mexico.)

Habitat.—Arid Lowland Scrub.

Distribution.—Formerly *resident* on Socorro Island, in the Revillagigedo Islands, off western Mexico; several recent searches (1988–1991) found only *Z. macroura* (a new invader to Socorro) and confirm the extirpation in the wild of *Z. graysoni*, although there are still living birds in captivity at this time.

Notes.—Although considered by many authors as conspecific with *Z. macroura*, differences in morphology, vocalizations, and behavior support the maintenance of specific status for *Z. graysoni* (Baptista et al. 1983).

Genus ECTOPISTES Swainson

Ectopistes Swainson, 1827, Zool. J. 3: 362. Type, by subsequent designation (Swainson, 1837), Columba migratoria Linnaeus.

† Ectopistes migratorius (Linnaeus). Passenger Pigeon.

Columba migratoria Linnaeus, 1766, Syst. Nat. (ed. 12) 1: 285. Based mainly on "The Pigeon of Passage" Catesby, Nat. Hist. Carolina 1: 23, pl. 23. (in America septentrionali = South Carolina.)

Habitat.—Forest, foraging in open country and cultivated lands adjacent to forest.

Distribution.—EXTINCT. *Bred* formerly from central Montana, east-central Saskatchewan, southern Manitoba, Minnesota, Wisconsin, Michigan, central Ontario, southern Quebec, New Brunswick, Prince Edward Island, and Nova Scotia south to eastern Kansas, Oklahoma, Mississippi, and Georgia.

Wintered from Arkansas, southeastern Missouri, Tennessee, and North Carolina south to Texas, the Gulf coast, and northern Florida, occasionally north to Indiana, southern Pennsylvania, and Connecticut.

Casual or accidental to Nevada, Idaho, Wyoming, British Columbia, Mackenzie, Alberta, northern Saskatchewan, northern Manitoba, Baffin Bay, northern Quebec, Labrador, Prince Edward Island, Bermuda, Cuba (Havana market), and Mexico (recorded Puebla, Veracruz, and Tabasco); also in Scotland, Ireland, and France, although the European individuals may have been escapes from captivity. Last specimen obtained in the wild taken at Sargento, Pike County, Ohio, on 24 March 1900; last living individual died in captivity in the Cincinnati Zoological Gardens, Cincinnati, Ohio, on 1 September 1914.

Notes.—Oberholser (1974) used the name *E. canadensis* (Linnaeus), but see Banks and Browning (1995).

Genus COLUMBINA Spix

Columbina Spix, 1825, Avium Spec. Nov. Bras. 2: 57. Type, by subsequent designation (G. R. Gray, 1841), Columbina strepitans Spix = Columba picui Temminck.

Columbigallina Boie, 1826, Isis von Oken, col. 977. Type, by monotypy, Columba passerina Linnaeus.

Chamæpelia Swainson, 1827, Zool. J. 3: 361. Type, by subsequent designation (G. R. Gray, 1841), Columba passerina Linnaeus.

Scardafella Bonaparte, 1855, C. R. Acad. Sci. Paris 40: 24. Type, by original designation, Columba squamosa Temminck (not Bonnaterre) = Columba squammata Lesson.

Columbina inca (Lesson). Inca Dove.

Chamæpelia inca Lesson, 1847, Descr. Mamm. Ois., p. 211. (Mexico [probably west coast].)

Habitat.—Second-growth Scrub, Riparian Thickets, Arid Lowland Scrub, Arid Montane Scrub (0–2400 m; Tropical, less frequently Subtropical zones).

Distribution.—Resident from southeastern California, northeastern Baja California, southern Nevada, central Arizona, southern New Mexico, central Texas, and western Louisiana south through Mexico (except the Yucatan Peninsula and the remainder of Baja California), Guatemala (rare in Petén and Caribbean lowlands), El Salvador, Honduras (Pacific lowlands and arid interior valleys), and Nicaragua (Pacific lowlands) to northwestern Costa Rica (Guanacaste and highlands to vicinity of San José); and, at least formerly, in the Florida Keys (Key West), where now apparently extirpated.

Wanders regularly to eastern and southwestern California (Inyo, Los Angeles, and Kern counties), and casually to southern Utah, north-central and southeastern Colorado, North Dakota, Nebraska, Kansas, northwestern Missouri, Oklahoma, Arkansas, and northeastern Louisiana. Accidental in Ontario. The origin of the Key West breeding populations may

have been escaped cage-birds.

Notes.—Often placed in the genus *Scardafella*, but see Johnston (1961). *Columbina inca* is sometimes merged with *C. squammata* (Lesson, 1831) of South American (Hellmayr and Conover 1942, Mayr and Short 1970).

Columbina passerina (Linnaeus). Common Ground-Dove.

Columba passerina Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 165. Based mainly on "The Ground Dove" Catesby, Nat. Hist. Carolina 1: 26, pl. 26. (in America inter tropicos = South Carolina.)

Habitat.—Arid Lowland Scrub, Arid Montane Scrub, Second-growth Scrub, Pastures/Agricultural Lands, lowland pine savanna (0–2300 m; Tropical and Subtropical zones).

Distribution.—Resident from southern California (north to Santa Barbara County), central Arizona, southwestern New Mexico, central Texas, the Gulf coast, South Carolina, Bermuda, and the Bahamas south through Mexico (including Socorro Island in the Revillagigedos, Tres Marías and Tres Marietas islands off Nayarit, and islands off the Yucatan Peninsula, but rare in the central highlands), the Antilles, and Central America (mostly in the highlands and arid interior, but also in the Caribbean lowland savanna, and in the Bay Islands off Honduras) to central Costa Rica (Guanacaste and the arid central highlands); in western Panama (Azuero Peninsula); and in northern South America from Colombia, Venezuela (including islands from the Netherlands Antilles east to Trinidad), and the Guianas south to Ecuador and eastern Brazil. Northwestern populations are partly migratory.

Wanders casually north to central California, southern Nevada, Utah, Wyoming, Nebraska, Iowa, Wisconsin, northern Michigan, central Ontario, Pennsylvania, New York, Massachusetts, and Nova Scotia.

Notes.—Also known as Scaly-breasted Ground-Dove. Oberholser (1974) used the generic name *Columbigallina*.

Columbina minuta (Linnaeus). Plain-breasted Ground-Dove.

Columba minuta Linnaeus, 1766, Syst. Nat. (ed. 12) 1: 285. Based on "La petite Tourterelle brun d'Amérique" Brisson, Ornithologie 1: 116, pl. 8, fig. 2. (in America = Cayenne.)

Habitat.—Arid Lowland Scrub, Low Seasonally Wet Grassland, Arid Montane Scrub, Second-growth Scrub (0–1400 m; Tropical and Subtropical zones).

Distribution.—Resident on the Gulf-Caribbean slope of Middle America in southern Mexico (southern Veracruz, northern Oaxaca, Tabasco, Chiapas, and southwest Campeche, presumably also Morelos), Belize, Guatemala, and, locally, north-central and northeastern Nicaragua (probably also in eastern Honduras) and extreme northeastern Costa Rica; along the Pacific coast of Middle America locally from Jalisco, Guerrero, and southwestern Oaxaca south to Costa Rica (not recorded Honduras or Pacific lowlands of Nicaragua, but present in the central highlands of Nicaragua) and Panama (east to eastern Panamá province, also recorded on Caribbean slope in Canal area); and disjunctly in South America in northern Colombia, Venezuela, Trinidad, the Guianas, Peru, eastern and central Brazil, eastern Bolivia, and northern Paraguay.

Columbina talpacoti (Temminck). Ruddy Ground-Dove.

Columba talpacoti Temminck, 1810, Les Pigeons, livr. 12/13, Les Colombi-Gallines, p. 22. (l'Amérique méridionale = Brazil.)

Habitat.—Second-growth Scrub, Riparian Thickets, Arid Lowland Scrub (0-1200 m; Tropical, less frequently Subtropical zones).

Distribution.—Resident from southern Sonora, eastern San Luis Potosí, and Tamaulipas south through Middle America (including Cozumel and Cancun islands off Quintana Roo, and Coiba and Pearl islands off Panama), and in South America from Colombia, Venezuela (including Margarita Island), Tobago, Trinidad, and the Guianas south, east of the Andes, to northern Argentina and northern Uruguay.

Ranges north rarely to southern California (north to Santa Barbara and Inyo counties), southern Arizona, and western and southern Texas, casually to southern Nevada, southwestern New Mexico, southern Baja California (sight reports), and Chile.

Notes.—C. talpacoti and C. buckleyi (Sclater and Salvin, 1877) of western Ecuador and northwestern Peru, form a superspecies (Goodwin 1983). Oberholser (1974) used the generic name Columbigallina.

Genus CLARAVIS Oberholser

Peristera (not Rafinesque, 1815) Swainson, 1827, Zool. J. 3: 360. Type, by original designation, Columba cinerea Temminck = Peristera pretiosa Ferrari-Perez.

Claravis Oberholser, 1899, Proc. Acad. Nat. Sci. Philadelphia 51: 203. New name for *Peristera* Swainson, preoccupied.

Claravis pretiosa (Ferrari-Perez). Blue Ground-Dove.

Columba cinerea (not Scopoli, 1786) Temminck, 1811, Les Pigeons, livr. 14/15, Les Colombes, p. 126, pl. 58. (au Brésil = Brazil.)

Peristera pretiosa Ferrari-Perez, 1886, Proc. U. S. Natl. Mus. 9: 175. New name for Columba cinerea Temminck, preoccupied.

Habitat.—Tropical Lowland Evergreen Forest Edge, Secondary Forest, River-edge Forest, Gallery Forest (0–1200 m; Tropical and lower Subtropical zones).

Distribution.—Resident from Chiapas on the Pacific slope, and from southeastern San Luis Potosí, Hidalgo, and southern Tamaulipas on the Gulf-Caribbean slope south through Middle America, and in South America from Colombia, Venezuela, Trinidad, and the Guianas south, west of the Andes to northwestern Peru, and east of the Andes to northern Argentina, Paraguay, and southeastern Brazil.

Claravis mondetoura (Bonaparte). Maroon-chested Ground-Dove.

Peristera mondetoura Bonaparte, 1856, C. R. Acad. Sci. Paris 42: 765. (Caracas, Venezuela.)

Habitat.—Montane Evergreen Forest, especially with heavy undergrowth or bamboo (900-3000 m; Subtropical Zone).

Distribution.—Resident locally in the mountains of Veracruz, Chiapas, Guatemala, El Salvador, Honduras, Costa Rica, and western Panama (Chiriquí); and in the Andes of South America from Colombia and northwestern Venezuela south to northern Bolivia.

Notes.—C. mondetoura and C. godefrida (Temminck, 1811), of eastern South America, constitute a superspecies (Goodwin 1983).

Genus LEPTOTILA Swainson

Leptotila Swainson, 1837, Class. Birds 2: 349. Type, by monotypy, P[eristera]. rufaxilla Nat. Lib. v. pl. 24 = Columba jamaicensis Linnaeus.

Leptotila verreauxi Bonaparte. White-tipped Dove.

Leptotila verreauxi Bonaparte, 1855, C. R. Acad. Sci. Paris 40: 99. (de la Nouvelle-Grenade = Colombia.)

Habitat.—Tropical Deciduous Forest, Gallery Forest, Secondary Forest, River-edge Forest, Tropical Lowland Evergreen Forest Edge (0–2800 m; Tropical to lower Temperate zones).

Distribution.—Resident [verreauxi group] from central Sonora, southwestern Chihuahua, southeastern San Luis Potosí, Nuevo León, and southern Texas (lower Rio Grande Valley north to central Texas coast) south through Middle America (including the Tres Marías Islands off Nayarit, and the Pearl Islands and many other small islands off Panama), and in South America from Colombia, Venezuela (including islands from the Netherlands Antilles east to Tobago and Trinidad), and the Guianas south, west of the Andes, to northern Peru; and [brasiliensis group] from eastern Peru, eastern Bolivia, and Brazil south to northern Argentina and Uruguay.

Notes.—Also known as White-fronted Dove. Groups: L. verreauxi [White-tipped Dove] and L. brasiliensis (Bonaparte, 1856) [Brazilian Dove]. Leptotila verreauxi and the South American L. megalura Sclater and Salvin, 1879, appear to constitute a superspecies (Goodwin 1983).

Leptotila rufaxilla (Richard and Bernard). Gray-fronted Dove.

Columba Rufaxilla Richard and Bernard, 1792, Actes Soc. Hist. Nat. Paris 1: 118. (Cayenne.)

Habitat.—Tropical Lowland Evergreen Forest Edge, Secondary Forest (0–1000 m; Tropical and lower Subtropical zones);

Distribution.—Resident [plumbeiceps group] from southern Tamaulipas, southeastern San Luis Potosí, southern Veracruz, and northern Oaxaca south on the Gulf-Caribbean slope (except Yucatán) through Belize, northern Guatemala, Honduras, Nicaragua (also Pacific slope in southwest), and Costa Rica (both slopes) to western Panama (western Bocas del Toro), and in the Western Andes and Cauca Valley of Colombia; [battyi group] in western Panama (Azuero Peninsula in southern Veraguas and western Herrera, and Cébaco and Coiba islands); and [rufaxilla group] in South America from eastern Colombia, Venezuela, Trinidad, and the Guianas south, east of the Andes, to central Bolivia, Paraguay, northeastern Argentina, and southern Brazil.

Notes.—Various groups in this species are often (Goodwin 1983) considered distinct species, L. plumbeiceps Sclater and Salvin, 1868 [Gray-headed Dove], which includes battyi (along with L. wellsi), and L. rufaxilla [Gray-fronted Dove]. Wetmore (1968) recognized L. battyi Rothschild, 1901 [Brown-backed Dove] as a distinct species, and Howell and Webb (1995) recognized L. plumbeiceps as a species. Leptotila rufaxilla, L. wellsi, and L. jamaicensis appear to constitute a superspecies (Goodwin 1983). See comments under L. wellsi.

Leptotila wellsi (Lawrence). Grenada Dove.

Engyptila wellsi Lawrence, 1884, Auk, 1, p. 180. (Fontenoy, St. Georges, Grenada.)

Habitat.—Tropical Deciduous Forest.

Distribution.—Resident on the southwestern peninsula of Grenada, where surviving in small numbers; formerly more widely distributed on Grenada and on offshore islands (Glover's, Green). Not definitely known from Tobago or St. Vincent although sometimes listed for those islands.

Notes.—Formerly (A.O.U. 1983) included with *L. rufaxilla*, from which it differs in vocalizations, plumage, and soft part colors (Blockstein and Hardy 1989). See comments under *L. rufaxilla*.

Leptotila jamaicensis (Linnaeus). Caribbean Dove.

Columba jamaicensis Linnaeus, 1766, Syst. Nat. (ed. 12) 1: 283. Based on Columba minor ventre candido Sloane, Voy. Jamaica 2: 303, pl. 262, fig. 1, and "Le Pigeon de la Jamaïque" Brisson, Ornithologie 1: 134. (in Jamaica.)

Habitat.—Tropical Deciduous Forest, Tropical Lowland Evergreen Forest Edge, Secondary Forest.

Distribution.—Resident on Jamaica, Grand Cayman Island, the northern Yucatan Pen-

insula (including Holbox, Mujeres, Cancun, and Cozumel islands), on islands off Belize (Ambergris Cay) and Honduras (Roatán and Barbareta in the Bay Islands, and Little Hog Island), and on Isla San Andrés in the western Caribbean Sea.

Introduced and established in the Bahamas (New Providence).

Notes.—Also known as White-bellied Dove. See comments under L. rufaxilla.

Leptotila cassini Lawrence. Gray-chested Dove.

Leptotila cassini Lawrence, 1867, Proc. Acad. Nat. Sci. Philadelphia 19: 94. (Line of the Panama Railroad, New Granada = Atlantic slope, Canal area.)

Habitat.—Tropical Lowland Evergreen Forest Edge, Secondary Forest (0–1400 m; Tropical and lower Subtropical zones).

Distribution.—Resident on the Gulf-Caribbean slope of Middle America from eastern Tabasco and northern Chiapas south through Belize, northern Guatemala, Honduras, and Nicaragua, and on both slopes from Costa Rica through Panama to northern Colombia.

Notes.—Also known as Cassin's Dove.

Genus GEOTRYGON Gosse

Geotrygon Gosse, 1847, Birds Jamaica, p. 316 (footnote). Type, by subsequent designation (Reichenbach, 1853), Columba cristata Latham [= Gmelin, not Temminck] = Geotrygon sylvatica Gosse = Columbigallina versicolor Lafresnaye.

Oreopeleia Reichenbach, 1853, Handb. Spec. Ornithol., Die Vögel, pt. 3 (1852), p.
 xxv. Type, by original designation, "Columba martinicana" Brisson = Columba martinica Linnaeus = Columba montana Linnaeus.

Geotrygon veraguensis Lawrence. Olive-backed Quail-Dove.

Geotrygon veraguensis Lawrence, 1867, Ann. Lyc. Nat. Hist. N. Y. 8: 349. (Veragua [Panama].)

Habitat.—Tropical Lowland Evergreen Forest (0–900 m; Tropical Zone).

Distribution.—Resident in the Caribbean lowlands of Costa Rica and Panama (also on Pacific slope in eastern Panamá province and Darién), and in western Colombia and northwestern Ecuador.

Notes.—Also known as Veraguas Quail-Dove.

Geotrygon chrysia Bonaparte. Key West Quail-Dove.

Geotrygon chrysia Bonaparte, 1855, C. R. Acad. Sci. Paris 40: 100. (Floride = Florida.)

Habitat.—Tropical Deciduous Forest (0-500 m).

Distribution.—Resident in the Bahamas (Grand Bahama, Great Abaco, Andros, New Providence, Eleuthera, San Salvador, Long Island, and North Caicos), Cuba, the Isle of Pines, Hispaniola (including Gonâve, Tortue, and Catalina islands), Puerto Rico (possibly also Mona Island).

Casual in southern Florida (the Florida Keys, and southern mainland, mostly near coasts). Formerly reported as common and breeding at Key West (Howell 1932).

Notes.—G. chrysia and G. mystacea constitute a superspecies (Goodwin 1983).

Geotrygon mystacea (Temminck). Bridled Quail-Dove.

Columba mystacea Temminck, 1811, Les Pigeons, livr. 14/15, Les Colombes, p. 124, pl. 56. (l'Amerique = probably Lesser Antilles.)

Habitat.—Tropical Deciduous Forest, Tropical Lowland Evergreen Forest (0-700 m). **Distribution**.—Resident in eastern Puerto Rico (locally), the Virgin Islands (except Anegada), and Lesser Antilles (from Saba and Barbuda south to St. Lucia).

Notes.—See comments under G. chrysia.

Geotrygon albifacies Sclater. White-faced Quail-Dove.

Geotrygon albifacies Sclater, 1858, Proc. Zool. Soc. London, p. 98. (environs of Jalapa, [Veracruz,] Southern Mexico.)

Habitat.—Montane Evergreen Forest (1200-2700 m; Subtropical Zone).

Distribution.—Resident in the mountains of southeastern San Luis Potosí, Hidalgo, Veracruz, Guerrero, Oaxaca, Chiapas, Guatemala, El Salvador, Honduras, and north-central Nicaragua.

Notes.—G. albifacies and G. chiriquensis are often (Goodwin 1983) considered as conspecific with the South American G. linearis (Prévost, 1843), but retention of three species constituting a superspecies complex seems more satisfactory. If all are combined into a single species, G. linearis, the name White-faced Quail-Dove is still appropriate.

Geotrygon chiriquensis Sclater. Chiriqui Quail-Dove.

Geotrygon chiriquensis Sclater, 1856, Proc. Zool. Soc. London, p. 143. (vicinity of the Town of David in the Province of Chiriqui in the State of Panama.)

Habitat.—Montane Evergreen Forest (600-3100 m; upper Tropical and Subtropical zones).

Distribution.—Resident in the mountains of Costa Rica and western Panama (Chiriquí and Veraguas).

Notes.—See comments under G. albifacies.

Geotrygon carrikeri Wetmore. Tuxtla Quail-Dove.

Geotrygon lawrenceii carrikeri Wetmore, 1941, Proc. Biol. Soc. Wash. 54, p. 205. (Volcán San Martín, Sierra de Tuxtla, Veracruz, Mexico, 3000–4000 feet elev.)

Habitat.—Montane Evergreen Forest (350–1500 m; upper Tropical and lower Subtropical zones).

Distribution.—Resident in southeastern Veracruz (Sierra de los Tuxtlas).

Notes.—Formerly treated as a subspecies of G. lawrencii, but see Peterson (1993); cf. Howell and Webb (1995).

Geotrygon lawrencii Salvin. Purplish-backed Quail-Dove.

Geotrygon lawrencii Salvin, 1874, Ibis, p. 329. (Calóbre, Veraguas, Panama.)

Habitat.—Montane Evergreen Forest (400–1050 m; upper Tropical and lower Subtropical zones).

Distribution.—Resident in the mountains of Costa Rica and Panama (east to Darién).

Notes.—Geotrygon lawrencii, G. costaricensis, and G. goldmani are closely related, but degree of relationship is uncertain; G. lawrencii and G. costaricensis are reportedly sympatric in Costa Rica, and G. lawrencii and G. goldmani overlap in eastern Panama.

Geotrygon costaricensis Lawrence. Buff-fronted Quail-Dove.

Geotrygon costaricensis Lawrence, 1868, Ann. Lyc. Nat. Hist. N. Y. 9: 136. (Costa Rica = Las Cruces de la Candelaria, Costa Rica.)

Habitat.—Montane Evergreen Forest (1000–3000 m; Subtropical and Temperate zones). **Distribution.**—Resident in the mountains of Costa Rica and western Panama (east to Veraguas).

Notes.—Also known as Costa Rican Quail-Dove. See comments under G. lawrencii.

Geotrygon goldmani Nelson. Russet-crowned Quail-Dove.

Geotrygon goldmani Nelson, 1912, Smithson. Misc. Collect. 60(3): 2. (Mount Pirri, at 5,000 feet altitude, head of Rio Limon, eastern Panama.)

Habitat.—Montane Evergreen Forest (750–1600 m; upper Tropical and lower Subtropical zones).

Distribution.—Resident in the mountains of eastern Panama (eastern Panamá province and Darién) and extreme northwestern Colombia (Juradó).

Notes.—Also known as Goldman's Quail-Dove. See comments under G. lawrencii.

Geotrygon caniceps (Gundlach). Gray-headed Quail-Dove.

Columba caniceps Gundlach, 1852, J. Boston Soc. Nat. Hist. 6: 315. (Cuba.)

Habitat.—Tropical Lowland Evergreen Forest (Cuba) and Montane Evergreen Forest (Hispaniola) (0–1800 m).

Distribution.—Resident in the lowlands of Cuba and in the mountains of Hispaniola (Dominican Republic, not known from Haiti).

Notes.—Also known as Moustached Quail-Dove.

Geotrygon versicolor (Lafresnaye). Crested Quail-Dove.

Columbigallina versicolor Lafresnaye, 1846, Rev. Zool. [Paris] 9: 321. (Jamaïque = Jamaica.)

Habitat.—Montane Evergreen Forest (100–1800 m). Distribution.—Resident in the mountains of Jamaica.

Geotrygon violacea (Temminck). Violaceous Quail-Dove.

Columba violacea Temminck, 1809, Les Pigeons, livr. 7, Les Colombes, p. 67, pl. 29. (le Nouveau Monde = Rio de Janeiro, Brazil.)

Habitat.—Tropical Lowland Evergreen Forest, Secondary Forest (0–1600 m; Tropical and lower Subtropical zones).

Distribution.—Resident in eastern Nicaragua (Caribbean lowlands), Costa Rica (humid Caribbean lowlands and foothills, also in semiarid Guanacaste lowlands on Pacific slope), and Panama (from Colón eastward), and in South America from northern Colombia, Venezuela, and Surinam south, east of the Andes, to Bolivia, northeastern Argentina, eastern Paraguay, and eastern Brazil.

Geotrygon montana (Linnaeus). Ruddy Quail-Dove.

Columba montana Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 163. Based mainly on "The Mountain Partridge" Sloane, Voy. Jamaica 2: 304, pl. 261, fig. 1. (in Jamaica.)

Habitat.—Tropical Lowland Evergreen Forest, Montane Evergreen Forest, Tropical Deciduous Forest (0–1400 m; Tropical and lower Subtropical, locally to lower Temperate zones).

Distribution.—Resident [montana group] in the Greater Antilles, on Grenada (in the Lesser Antilles), from southern Sinaloa, Puebla, and southern Tamaulipas south along both slopes of Middle America to Panama (including Isla Coiba and Isla San José in the Pearl Islands), and in South America from Colombia, Venezuela, Trinidad, and the Guianas south, west of the Andes to western Ecuador and east of the Andes to northeastern Argentina, northern Paraguay, and southeastern Brazil; and [martinica group] in the Lesser Antilles (from Guadeloupe and Dominica south to St. Vincent). Some (many?) populations evidently undergo seasonal movements.

Casual [montana group] in southern Texas (Bentsen-Rio Grande State Park, 2–6 March 1996), southern Florida (Florida Keys, Dry Tortugas), and the Virgin Islands.

Notes.—Groups: G. montana [Ruddy Quail-Dove] and G. martinica (Linnaeus, 1758) [Martinique Quail-Dove].

Genus STARNOENAS Bonaparte.

Starnænas Bonaparte, 1838, Geogr. Comp. List, p. 41. Type, by monotypy, Columba cyanocephala Linnaeus.

Starnoenas cyanocephala (Linnaeus). Blue-headed Quail-Dove.

Columba cyanocephala Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 163. Based on "The Turtle-Dove from Jamaica" Albin, Nat. Hist. Birds 2: 45, pl. 49. (in America = Jamaica.)

Habitat.—Tropical Lowland Evergreen Forest, Tropical Deciduous Forest.

Distribution.—Resident on Cuba.

Recorded from the Isle of Pines (one specimen, 1909) and Jamaica (apparently through attempted introduction). Specimens and reports from southern Florida are not sufficiently documented to constitute evidence of occurrence (Robertson and Woolfendon 1992).

Order **PSITTACIFORMES**: Parrots

Notes.—The Psittaciformes are sometimes divided into several families.

Family PSITTACIDAE: Lories, Parakeets, Macaws, and Parrots

Notes.—Individuals of many parrot species occur as escapes from captivity, especially in Florida (Robertson and Woolfenden 1992, Stevenson and Anderson 1994) and southern California (Johnston and Garrett 1994).

Subfamily PLATYCERCINAE: Australian Parakeets and Rosellas

Genus MELOPSITTACUS Gould

Melopsittacus Gould, 1840, Birds Aust., pt. 1, pl. [10] (= 5, pl. 44 of bound volume). Type, by monotypy, Psittacus undulatus Shaw.

Melopsittacus undulatus (Shaw). Budgerigar.

Psittacus undulatus Shaw, 1805, in Shaw and Nodder, Naturalists' Misc. 16: pl. 673. (New Holland = New South Wales, Australia.)

Habitat.—Suburbs with adjacent grassy open areas, such as beaches; in Australia, open woodland and scrubby areas, especially in semi-arid habitats, suburban areas, and parks.

Distribution.—Resident (though nomadic) through most of the interior of Australia, rarely ranging to coastal areas.

Introduced and established in west-central Florida (Charlotte to Citrus counties); escaped cage birds may be seen almost anywhere in North America. There is no evidence of establishment in Puerto Rico as previously reported.

Notes.—Also known as Shell Parakeet or Budgerygah.

Subfamily PSITTACINAE: Typical Parrots

Genus PSITTACULA Cuvier

Psittacula Cuvier, 1800, Leçons Anat. Comp. 1: table at end. Type, by subsequent designation (Mathews, 1917), Psittacus alexandri Linnaeus.

Psittacula krameri (Scopoli). Rose-ringed Parakeet.

Psittacus krameri Scopoli, 1769, Annus I, Hist.-Nat., p. 31. (No locality given = Senegal.)

Habitat.—Suburbs; in Africa, open woodland, savanna, cultivated lands, and areas around human habitation.

Distribution.—Resident in North Africa from Senegal east (south of the Sahara) to Eritrea, Ethiopia and Sudan; and in southern Asia from Afghanistan, India and Nepal south to Sri Lanka and Burma.

Introduced and established in small numbers in southern Florida (locally in Dade, Collier,

and Dixie counties, since 1960's), Egypt, the Near East, Zanzibar, Mauritius, Singapore, Hong Kong and Macao; small introduced groups have also persisted in the Hawaiian Islands (on Oahu since 1971, breeding reported on Hawaii in 1981, probably breeding also on Kauai) and Virginia (Hampton, since 1973).

Subfamily ARINAE: New World Parakeets, Macaws, and Parrots

Genus PYRRHURA Bonaparte

Pyrrhura Bonaparte, 1856, Naumannia 6: Consp. Gen. Psittacorum, gen. 14. Type, by subsequent designation (Salvadori, 1891), Psittacus vittatus Shaw [not Boddaert] = Psittacus frontalis Vieillot.

Pyrrhura picta (Müller). Painted Parakeet.

Psittacus pictus P. L. S. Müller, 1776, Natursyst., Suppl., pl. 75. (Cayenne.)

Habitat.—Tropical Lowland Evergreen Forest (0–1200 m; Tropical Zone).

Distribution.—Resident in western Panama (Azuero Peninsula); and in South America from northern Colombia, southern Venezuela and the Guianas south, east of the Andes, to central Peru and Amazonian Brazil.

Notes.—The populations in Panama and northern Colombia may be subspecies of the South American *P. leucotis* (Kuhl, 1820) rather than *P. picta* (Ridgely and Gwynne 1989). *Pyrrhura picta* and *P. leucotis* constitute a superspecies (Delgado 1985, Sibley and Monroe 1990) and may even be conspecific (G. Smith 1982).

Pyrrhura hoffmanni (Cabanis). Sulphur-winged Parakeet.

Conurus hoffmanni Cabanis, 1861, Sitzungber. Ges. Naturforsch. Freunde Berlin, 13 November. (Costa Rica.)

Habitat.—Montane Evergreen Forest, Secondary Forest (1200-3000 m; Subtropical, rarely Tropical zones).

Distribution.—Resident in the mountains of Costa Rica (from Cordillera de Talamanca and Dota Mountains southward, including to Volcán Irazú) and western Panama (Chiriquí, Bocas del Toro and Veraguas, occurring also in the lowlands of the latter two).

Notes.—Also known as Hoffmann's Conure.

Genus MYIOPSITTA Bonaparte

Myiopsitta Bonaparte, 1854, Rev. Mag. Zool. (2)6: 150. Type, by subsequent designation (G. R. Gray, 1855), Psittacus monachus Boddaert.

Myiopsitta monachus (Boddaert). Monk Parakeet.

Psittacus monachus Boddaert, 1783, Table Planches Enlum., p. 48. Based on Daubenton, Planches Enlum., pl. 768. (No locality given = Montevideo, Uruguay.)

Habitat.—Primarily urban parks and suburbs; in South America, open woodland, savanna, arid scrubland, riverine forest, cultivated lands and orchards, especially around human habitation (Tropical and Subtropical zones).

Distribution.—Resident from central Bolivia, Paraguay and southern Brazil south to central Argentina.

Introduced and established in the eastern United States from Illinois, Michigan, southern Quebec, southern New York, Connecticut and Rhode Island south to New Jersey, with individual reports west and south to California, Oregon, Idaho, Oklahoma, Kentucky, and Virginia (control measures in progress in several localities); and in Texas, Florida, the Bahama Islands (Eleuthera), the Cayman Islands (Grand Cayman), Puerto Rico, the Dominican Republic, and Guadeloupe.

Genus CONUROPSIS Salvadori

Conuropsis Salvadori, 1891, Cat. Birds Brit. Mus. 20: xiii, 146, 203. Type, by original designation, *Psittacus carolinensis* Linnaeus.

†Conuropsis carolinensis (Linnaeus). Carolina Parakeet.

Psittacus carolinensis Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 97. Based on the "Parrot of Carolina" Catesby, Nat. Hist. Carolina 1: 11, pl. 11. (in Carolina, Virginia = South Carolina.)

Habitat.—Riverine forest, cypress swamps and deciduous woodland, foraging in open situations including cultivated lands and gardens.

Distribution.—EXTINCT. Formerly ranged from eastern Nebraska (reports from the Dakotas questionable), Iowa, southeastern Wisconsin, Ohio, Pennsylvania and New Jersey south to southern Oklahoma, the Gulf states (from Texas eastward) and south-central Florida. Last known living individual died in the Cincinnati Zoo, 21 February 1918, although there are questionable sight reports for Florida in 1926 and South Carolina in 1936.

Genus ARATINGA Spix

Aratinga Spix, 1824, Avium Spec. Nov. Bras. 1: 29. Type, by subsequent designation (G. R. Gray, 1855), Psittacus luteus Boddaert = Psittacus solstitialis Linnaeus.

Notes.—Members of *Aratinga* and other related genera are sometimes referred to by the group name Conure.

Aratinga holochlora (Sclater). Green Parakeet.

Conurus holochlorus Sclater, 1859, Ann. Mag. Nat. Hist. (3)4: 224. (Jalapa, Vera Cruz, Mexico.)

Habitat.—[holochlora group] Tropical Lowland Evergreen Forest, Tropical Deciduous Forest, Secondary Forest, Pine-Oak Forest (0–2200 m; Tropical and Subtropical zones); [brevipes group] Tropical Deciduous Forest (0–1000 m); and [rubritorquis group] Pine-Oak Forest, Pine Forest, Tropical Deciduous Forest (800–2600 m; Subtropical Zone).

Distribution.—Resident [holochlora group] in southwestern Chihuahua and northeastern Sinaloa, wandering to southern Sonora, and from southern Nuevo León and Tamaulipas south to Veracruz, with disjunct populations in southeastern Oaxaca and Chiapas; [brevipes group] on Socorro Island, in the Revillagigedos; and [rubritorquis group] in the highlands of central and eastern Guatemala, El Salvador, Honduras and northern Nicaragua.

Reports from southern Florida are based on escaped cage-birds; established in southern Texas in lower Rio Grande Valley, probably from introduced individuals.

Notes.—Groups: A. holochlora [Green Parakeet]; A. brevipes Lawrence, 1871 [Socorro Parakeet]; and A. rubritorquis (Sclater, 1887) [Red-throated Parakeet]. Howell and Webb (1995) treated the three groups as separate species. Aratinga holochlora and A. strenua constitute a superspecies; they are sometimes considered conspecific (e.g., Forshaw 1973), but differences are retained in areas of close approach.

Aratinga strenua (Ridgway). Pacific Parakeet.

Conurus holochlorus strenuus Ridgway, 1915, Proc. Biol. Soc. Wash. 28: 106. (Ometepe, Nicaragua.)

Habitat.—Tropical Deciduous Forest, Gallery Forest, Tropical Lowland Evergreen Forest, Secondary Forest (0–1300 m Tropical, less frequently Subtropical zones).

Distribution.—Resident on the Pacific slope of Middle America from southeastern Oaxaca and Chiapas south to southwestern Nicaragua.

Notes.—See comments under A. holochlora.

Aratinga finschi (Salvin). Crimson-fronted Parakeet.

Conurus finschi Salvin, 1871, Ibis, p. 91, pl. 4. (Bugaba, Chiriqui, Veragua [= Panama].)

Habitat.—Tropical Lowland Evergreen Forest Edge, Secondary Forest (0–1600 m; Tropical and Subtropical zones).

Distribution.—Resident in southeastern Nicaragua (Caribbean lowlands), Costa Rica (primarily Caribbean slope and Golfo Dulce lowlands on Pacific slope, wandering elsewhere on latter in dry season on cordilleras Guanacaste and Central), and western Panama (Caribbean slope in western Bocas del Toro and western Chiriquí, and Pacific lowlands in western Veraguas and Herrera).

Reports from southern Florida are based on escaped cage-birds (Stevenson and Anderson 1994).

Notes.—A. finschi and the South American A. leucophthalmus (P. L. S. Müller, 1776) constitute a superspecies (Sibley and Monroe 1990).

Aratinga chloroptera (de Souancé). Hispaniolan Parakeet.

Psittacara chloroptera de Souancé, 1856, Rev. Mag. Zool. (2)8: 59. (Saint-Domingue = Hispaniola.)

Habitat.—Montane Evergreen Forest, Tropical Lowland Evergreen Forest (0–2000 m). **Distribution.**—Resident on Hispaniola, on Mona Island (formerly, last individual taken in 1892), and probably also on Puerto Rico (based on hearsay evidence, but certainly not there after 1883).

Reports from southern Florida are based on escaped cage-birds (Stevenson and Anderson 1994).

Notes.—A. chloroptera and A. euops constitute a superspecies (Sibley and Monroe 1990).

Aratinga euops (Wagler). Cuban Parakeet.

Sittace euops Wagler, 1832, Abh. Math. Phys. Kl. Bayr. Akad. Wiss. 1: 638, pl. 24, fig. 2. (Cuba.)

Habitat.—Tropical Lowland Evergreen Forest, Tropical Deciduous Forest (0-800 m). **Distribution**.—Resident on Cuba (widespread, most common in remote forested areas) and the Isle of Pines (apparently surviving in small numbers).

Notes.—See comments under A. chloroptera.

Aratinga nana (Vigors). Olive-throated Parakeet.

Psittacara nana Vigors, 1830, Zool. J. 5: 273. (Jamaica.)

Habitat.—Tropical Lowland Evergreen Forest Edge, Gallery Forest, Secondary Forest (0-800 m; Tropical and lower Subtropical zones).

Distribution.—Resident [astec group] on the Gulf-Caribbean slope of Middle America from southern Tamaulipas and Veracruz south (including Holbox Island, off Quintana Roo) to extreme western Panama (western Bocas del Toro); and [nana group] on Jamaica.

Notes.—Groups: A. astec (de Souancé, 1875) [Aztec Parakeet] and A. nana [Jamaican Parakeet]. Howell and Webb (1995) treated the groups as species.

Aratinga canicularis (Linnaeus). Orange-fronted Parakeet.

Psittacus canicularis Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 98. Based mainly on "The Red and Blue-headed Parakeet" Edwards, Nat. Hist. Birds 4: 176, pl. 176. (in America = northwestern Costa Rica.)

Habitat.—Tropical Deciduous Forest, Gallery Forest, Secondary Forest (0–1500 m; Tropical and lower Subtropical zones).

Distribution.—Resident on the Pacific slope of Middle America from central Sinaloa and western Durango south to northwestern Costa Rica (to the Gulf of Nicoya and San José region), also in the arid Comayagua Valley on the Caribbean slope of Honduras.

Introduced in Puerto Rico; reports from southern Florida are based on escaped cage-birds (Stevenson and Anderson 1994).

Notes.—A. canicularis and the South American A. aurea (Gmelin, 1788) may constitute a superspecies (Sibley and Monroe 1990).

Aratinga pertinax (Linnaeus). Brown-throated Parakeet.

Psittacus pertinax Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 98. Based mainly on "The Brown-throated Parrakeet" Edwards, Nat. Hist. Birds 4: 177, pl. 177. (in Indiis = Curação.)

Habitat.—Tropical Deciduous Forest, Arid Lowland Scrub, Second-growth Scrub, Tropical Lowland Evergreen Forest Edge (0-1200 m; Tropical Zone).

Distribution.—Resident [ocularis group] in western Panama (Pacific slope from western Chiriquí to eastern Panamá province, ranging to Caribbean slope in the Canal area); and [pertinax group] along the north coast of South America (including islands from the Netherlands Antilles east to Margarita) from northern Colombia east to the Guianas and northern Brazil.

Introduced and established (before 1860) [pertinax group] on St. Thomas, in the Virgin Islands (from the population on Curação), then spreading to Culebra Island, Tortola, and Puerto Rico. These populations disappeared between 1975 and 1982 (Wiley 1993).

Reports from southern Florida are based on escaped cage-birds (Stevenson and Anderson 1994).

Notes.—Known on St. Thomas as the Caribbean Parakeet. Groups: A. ocularis (Sclater and Salvin, 1865) [Veraguas Parakeet] and A. pertinax [Brown-throated Parakeet]. Aratinga pertinax and South American A. cactorum (Kuhl, 1820), may constitute a superspecies (Sibley and Monroe 1990).

Genus ARA Lacépède

Ara Lacépède, 1799, Tabl. Mamm. Ois., p. 1. Type, by subsequent designation (Ridgway, 1916), *Psittacus macao* Linnaeus.

Ara severa (Linnaeus). Chestnut-fronted Macaw.

Psittacus severus Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 97. Based on Psittacus severus Linnaeus, Mus. Adolphi Friderici 1: 13. (in Indiis = Amazon River.)

Habitat.—River-edge Forest, Gallery Forest, Tropical Lowland Evergreen Forest Edge (0-800 m; Tropical and lower Subtropical zones).

Distribution.—Resident from eastern Panama (Darién, possibly ranging, at least formerly, west to the Canal area), Colombia, Venezuela and the Guianas south, east of the Andes, to central Bolivia and Amazonian and central Brazil.

Breeding has been reported in Florida (Miami), but there is no evidence for establishment (Stevenson and Anderson 1994).

Ara militaris (Linnaeus). Military Macaw.

Psittacus militaris Linnaeus, 1766, Syst. Nat. (ed. 12) 1: 139. (No locality given = Colombia.)

Habitat.—Montane Evergreen Forest, Tropical Deciduous Forest, Pine-Oak Forest, Tropical Lowland Evergreen Forest (450–2600 m; Tropical, less commonly Subtropical and lower Temperate zones).

Distribution.—Resident in Mexico from southeastern Sonora, southwestern Chihuahua and Sinaloa south to Guerrero (formerly), Oaxaca and Chiapas, also (at least formerly) in eastern Nuevo León, southern Tamaulipas and southeastern San Luis Potosí; and in South America in a series of isolated populations in northern Venezuela, Colombia (east and south of the range of A. ambigua), eastern Ecuador, eastern Peru, eastern Bolivia, and northwestern Argentina.

Reports from southern Florida are based on escaped cage-birds (Stevenson and Anderson 1994).

Notes.—A. militaris and A. ambigua may constitute a superspecies (Sibley and Monroe 1990) and may even be conspecific (Fjeldså et al. 1987).

Ara ambigua (Bechstein). Great Green Macaw.

Psittacus ambiguus Bechstein, 1811, in Latham, Allg. Uebers. Vögel 4(1): 65. Based on "Le Grand Ara Militaire" Levaillant, Hist. Nat. Perr. 1: 15, pl. 6. (South America = northwestern Colombia.)

Habitat.—Tropical Lowland Evergreen Forest (0–700 m; Tropical and Subtropical zones). **Distribution.**—Resident on the Caribbean slope of eastern Honduras (Olancho, Mosquitia), Nicaragua (also Pacific slope) and Costa Rica, locally on both slopes of Panama, and in northwestern Colombia, with an isolated population in western Ecuador. Now much reduced and local throughout its Central American range.

Notes.—Also known as Green Macaw or Buffon's Macaw. See comments under A. militaris.

Ara chloropterus Gray. Red-and-green Macaw.

Macrocercus macao (not Psittacus macao Linnaeus) Vieillot, 1816, Nouv. Dict. Hist Nat. (nouv. éd.) 2: 262. (British Guiana.)

Ara chloropterus G. R. Gray, 1859, List Birds Brit. Mus., pt. 3(2), p. 26. New name for *Macrocercus macao* Vieillot, preoccupied.

Habitat.—Tropical Lowland Evergreen Forest, Montane Evergreen Forest (0–1400 m; Tropical and lower Subtropical zones).

Distribution.—Resident in eastern Panama (San Blas and Darién, probably also eastern Panamá province), and in South America from northern and eastern Colombia, Venezuela and the Guianas south, east of the Andes, to northern Argentina and southeastern Brazil.

Notes.—Also known as Green-winged Macaw and Red-blue-and-green Macaw.

Ara macao (Linnaeus). Scarlet Macaw.

Psittacus Macao Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 96. Based mainly on "The Red and Blue Maccaw" Edwards, Nat. Hist. Birds 4: 158, pl. 158. (in America meridionali = Pernambuco, eastern Brazil.)

Habitat.—Tropical Lowland Evergreen Forest, Tropical Deciduous Forest, Gallery Forest, lowland pine savanna (0–900 m; Tropical and lower Subtropical zones.)

Distribution.—Resident locally from eastern Chiapas and (at least formerly), southern Campeche (formerly north to southern Tamaulipas) south along the Gulf-Caribbean slope of Middle America to Honduras, on both slopes of Nicaragua, Costa Rica and Panama (including Isla Coiba), and in South America from Colombia, Venezuela, Trinidad and the Guianas south, east of the Andes, to central Bolivia and Amazonian Brazil. Extirpated from most of its Middle American range.

Reports from southern Florida are based on escaped cage-birds (Stevenson and Anderson 1994).

†Ara tricolor Bechstein. Cuban Macaw.

Ara tricolor Bechstein, 1811, in Latham, Allg. Uebers. Vögel 4(1): 64, pl. 1. Based on "L'Ara tricolor" Levaillant, Hist. Nat. Perr. 1: 13, pl. 5. (South America, error = Cuba.)

Ara cubensis Wetherbee, 1985, Carib. J. Sci. 21: 174. (Cuba.)

Habitat.—Forest edge and open country with scattered trees, especially palms.

Distribution.—EXTINCT. Formerly resident on Cuba (except Oriente Province), possibly also the Isle of Pines; last specimen taken in the Ciénaga de Zapata in 1864.

Notes.—For continued use of A. tricolor for the Cuban birds, contra Wetherbee (1985), see Walters (1995).

Ara ararauna (Linnaeus). Blue-and-yellow Macaw.

Psittacus Ararauna Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 96. Based mainly on "The Blue and Yellow Maccaw" Edwards, Nat. Hist. Birds 4: 159, pl. 159. (in America meridionali = Pernambuco, eastern Brazil.)

Habitat.—Gallery Forest, River-edge Forest, Tropical Lowland Evergreen Forest (0-700 m; Tropical Zone).

Distribution.—Resident from eastern Panama (Pacific slope in eastern Panamá province and Darién), Colombia, southern Venezuela, Trinidad and the Guianas south, east of the Andes, to central Bolivia, Paraguay, and central and eastern Brazil.

Introduced birds, presumably escapees, breed in Puerto Rico (Perez-Rivera 1996). Reports from southern Florida are based on escaped cage-birds (Stevenson and Anderson 1994).

Genus RHYNCHOPSITTA Bonaparte

Rhynchopsitta Bonaparte, 1854, Rev. Mag. Zool. (2) 6: 149. Type, by monotypy, Macrocercus pachyrhynchus Swainson.

Rhynchopsitta pachyrhyncha (Swainson). Thick-billed Parrot.

Macrocercus pachyrhynchus Swainson, 1827, Philos. Mag. (n.s.) 1: 439. (Table land, Mexico.)

Habitat.—Pine Forest, Pine-Oak Forest (1500–3400 m; Subtropical and Temperate zones). **Distribution.**—Breeds in the mountains of Chihuahua and Durango, probably elsewhere in the Sierra Madre Occidental of central and northern Mexico.

Wanders widely, recorded from central Sonora south to Jalisco and Michoacán, formerly recorded north to south-central and southeastern Arizona (Chiricahua, Dragoon, Galiuro and Patagonia mountains) and, possibly, southwestern New Mexico (unverified reports from the Animas Mountains), and east to México (Popocatépetl) and central Veracruz (Cofre de Perote and Jalapa).

Recently introduced in southeastern Arizona, ranging north to Mogollon Rim.

Notes.—Often considered conspecific with R. terrisi, but see Hardy (1967); they constitute a superspecies (Sibley and Monroe 1990).

Rhynchopsitta terrisi Moore. Maroon-fronted Parrot.

Rhynchopsitta terrisi Moore, 1947, Proc. Biol. Soc. Wash. 60: 27. (Sierra Potosí, about 7500 feet, Nuevo León, Mexico.)

Habitat.—Pine Forest, Pine-Oak Forest (1500–2800 m; upper Subtropical and Temperate zones).

Distribution.—Resident in the Sierra Madre Oriental of southeastern Coahuila, Nuevo León and western Tamaulipas.

Reports from southern Florida are based on escaped cage-birds.

Notes.—See comments under R. pachyrhyncha.

Genus BOLBORHYNCHUS Bonaparte

Bolborhynchus Bonaparte, 1857, Rem. Observ. Blanchard, Psittacides, p. 6. Type, by subsequent designation (Richmond, 1915), Myiopsitta catharina Bonaparte = Psittacula lineola Cassin.

Bolborhynchus lineola (Cassin). Barred Parakeet.

Psittacula lineola Cassin, 1853, Proc. Acad. Nat. Sci. Philadelphia 6: 372. (vicinity of the National bridge, Mexico = Puerto Nacional, Veracruz.)

Habitat.—Montane Evergreen Forest, often where bamboo is seeding (800–3300 m; Subtropical, less commonly Temperate or upper Tropical, zones).

Distribution.—Resident locally in the highlands of Middle America from northern Oa-

xaca, Veracruz and Chiapas south through Guatemala, Honduras, Nicaragua and Costa Rica to western Panama (Chiriquí, Bocas del Toro and Veraguas); and in the Andes of South America from Colombia and northwestern Venezuela south to central Peru.

Genus FORPUS Boie

Forpus Boie, 1858, J. Ornithol. 6: 363. Type, by subsequent designation (Hellmayr, 1929), Psittacus passerinus Linnaeus.

Forpus passerinus (Linnaeus). Green-rumped Parrotlet.

Psittacus passerinus Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 103. Based on Psittacus minimus Linnaeus, Mus. Adolphi Friderici 1: 14. (in America = Surinam.)

Habitat.—Tropical Deciduous Forest, Gallery Forest, Tropical Lowland Evergreen Forest Edge, Secondary Forest (0–900 m; Tropical and Subtropical zones).

Distribution.—Resident in northeastern Colombia, northern Venezuela, Trinidad, the Guianas and Brazil south to the Amazon basin; also recorded from Curação, where possibly introduced.

Introduced and established on Jamaica (common) and Barbados (rare and apparently decreasing); attempted introduction on Martinique was unsuccessful.

Notes.—Also known as Guianan Parrotlet. Forpus passerinus and F. xanthopterygius constitute a superspecies (Sibley and Monroe 1990).

Forpus cyanopygius (de Souancé). Mexican Parrotlet.

Psittacula cyanopygia de Souancé, 1856, Rev. Mag. Zool. (2)8: 157. (No locality given = northwestern Mexico.)

Habitat.—Tropical Deciduous Forest, Secondary Forest (0–1300 m; Tropical and lower Subtropical zones).

Distribution.—Resident in southern Sonora, Sinaloa, western Durango, Zacatecas, Nayarit (including the Tres Marías Islands), Jalisco, and Colima.

Notes.—Also known as Blue-rumped Parrotlet.

Forpus conspicillatus (Lafresnaye). Spectacled Parrotlet.

Psittacula conspicillata Lafresnaye, 1848, Rev. Zool. [Paris] 11: 172. (in Colombia aut Mexico = Honda, upper Magdalena River, Tolima, Colombia.)

Habitat.—Tropical Deciduous Forest, Secondary Forest, Tropical Lowland Evergreen Forest Edge (0–1800 m; Tropical and lower Subtropical zones).

Distribution.—Resident in eastern Panama (eastern Panamá province and eastern Darién), Colombia, and southwestern Venezuela.

Genus BROTOGERIS Vigors

Brotogeris Vigors, 1825, Zool. J. 2: 400. Type, by original designation, Psittacus pyrrhopterus Latham.

Brotogeris jugularis (Müller). Orange-chinned Parakeet.

Psittacus jugularis P. L. S. Müller, 1776, Natursyst., Suppl., p. 80. Based on "Petit Perruche à gorge jaune d'Amerique" Daubenton, Planches Enlum., pl. 190, fig. 1. (in America = Bonda, Santa Marta, Colombia.)

Habitat.—Tropical Deciduous Forest, Tropical Lowland Evergreen Forest Edge, Gallery Forest, Secondary Forest (0–1200 m; Tropical and lower Subtropical zones).

Distribution.—Resident in southwestern Mexico (Pacific lowlands of southeastern Oaxaca and Chiapas), Guatemala (Pacific lowlands), El Salvador, Honduras (Pacific lowlands and arid interior valleys), Nicaragua (Pacific drainage, and locally in cleared areas on Caribbean slope), Costa Rica (Pacific lowlands and humid Caribbean region south at least to Limón),

Panama (both slopes, including Coiba and Taboga islands), northern Colombia and northern Venezuela. Reports from Guerrero are open to question.

Reports from southern Florida are based on escaped cage-birds (Stevenson and Anderson 1994).

Notes.—Also known as Tovi Parakeet.

Brotogeris versicolurus (Müller). White-winged Parakeet.

Psittacus versicolurus P. L. S. Müller, 1776, Natursyst., Suppl., p. 75. (No locality given = Cayenne.)

Habitat.—Suburbs and parks; in South America, open woodland, scrubland and open areas with scattered trees, less frequently in dense forest, in both arid and humid situations (Tropical and lower Subtropical zones).

Distribution.—Resident from eastern Colombia, eastern Ecuador, and northeastern Peru east through the Amazon Basin to French Guiana and the Belém area of Pará, Brazil.

Introduced and established in southern California, west-central and southeastern Florida, Puerto Rico, and western Peru (Lima).

Notes.—Populations in Florida (Smith and Smith 1993) and southern California (Johnston and Garrett 1994) are being replaced by B. chiriri (Vieillot, 1817) [Yellow-chevroned Parakeet], formerly considered conspecific with versicolurus but separated on the basis of morphological differences and near sympatry in Pará, Brazil (Pinto and Camargo 1957). See Appendix.

Genus TOUIT Gray

Touit G. R. Gray, 1855, Cat. Genera Subgenera Birds, p. 89. Type, by original designation, *Psittacus huetii* Temminck.

Touit costaricensis (Cory). Red-fronted Parrotlet.

Urochroma costaricensis Cory, 1913, Field Mus. Nat. Hist. Publ., Ornithol. Ser. 1: 283. (vicinity of Puerto Limón, Costa Rica.)

Habitat.—Montane Evergreen Forest (500–1000 m; Tropical and Subtropical zones). **Distribution.**—Resident in Costa Rica (Turrialba to Puerto Limón, and Cordillera de Talamanca) and western and central Panama (Chiriquí, Bocas del Toro, Coclé).

Notes.—T. costaricensis and T. dilectissima have been considered conspecific, but see Wetmore (1968); they constitute a superspecies (Sibley and Monroe 1990).

Touit dilectissima (Sclater and Salvin). Blue-fronted Parrotlet.

Urochroma dilectissima Sclater and Salvin, 1871, Proc. Zool. Soc. London (1870), p. 788, pl. 47. (south of Mérida, Venezuela.)

Habitat.—Montane Evergreen Forest, Tropical Lowland Evergreen Forest (800–1700 m; Tropical and lower Subtropical zones).

Distribution.—Resident in eastern Panama (eastern Panamá province and Darién), northern and western Colombia, northwestern Venezuela and western Ecuador.

Notes.—See comments under *T. costaricensis*.

Genus PIONOPSITTA Bonaparte

Pionopsitta Bonaparte, 1854, Rev. Mag. Zool. (2) 6: 152. Type, by monotypy, Psittacus pileatus Scopoli.

Pionopsitta pyrilia (Bonaparte). Saffron-headed Parrot.

Psittacula pyrilia Bonaparte, 1853, C. R. Acad. Sci. Paris 37: 807, note. (Riohacha = Sierra Negra, southeast of Fonseca [Guajira Prov.], Colombia; Dugand, 1948, Caldasia 5: 183.)

Habitat.—Tropical Lowland Evergreen Forest, Montane Evergreen Forest (0–1000 m; Tropical and lower Subtropical zones).

Distribution.—Resident in extreme eastern Panama (eastern Darién), northern Colombia, and western Venezuela.

Pionopsitta haematotis (Sclater and Salvin). Brown-hooded Parrot.

Pionus hæmatotis Sclater and Salvin, 1860, Proc. Zool. Soc. London, p. 300. (In prov. Veræ Pacis regione calida = Vera Paz, Guatemala.)

Habitat.—Tropical Lowland Evergreen Forest, Montane Evergreen Forest (0–1200 m; Tropical and Subtropical zones).

Distribution.—Resident on the Gulf-Caribbean slope from southern Veracruz, northern Oaxaca, northern Chiapas, southern Campeche and southern Quintana Roo south to Nicaragua, on both slopes of Costa Rica and Panama, and from western Colombia to western Ecuador.

Notes.—P. haematotis and P. pulchra Berlepsch, 1897, of northern South America, constitute a superspecies (Sibley and Monroe 1990).

Genus PIONUS Wagler

Pionus Wagler, 1832, Abh. Math. Phys. Kl. Bayr. Akad. Wiss. 1: 497. Type, by subsequent designation (G. R. Gray, 1840), Psittacus menstruus Linnaeus.

Pionus menstruus (Linnaeus). Blue-headed Parrot.

Psittacus menstruus Linnaeus, 1766, Syst. Nat. (ed. 12) 1: 148. Based mainly on "The Blue-headed Parrot" Edwards, Glean. Nat. Hist. 3: 226, pl. 314. (in Surinamo = Surinam.)

Habitat.—River-edge Forest, Gallery Forest, Tropical Lowland Evergreen Forest Edge, Secondary Forest, lowland pine savanna (0–1200 m; Tropical and lower Subtropical zones).

Distribution.—Resident in eastern Costa Rica (from Río Pacuare on the Caribbean slope eastward and, rarely, in the Golfo Dulce region on the Pacific) and Panama (both slopes, including Coiba and the Pearl islands), and in South America from Colombia, Venezuela, Trinidad and the Guianas south, west of the Andes to western Ecuador and east of the Andes to central Bolivia, and Amazonian and southeastern Brazil.

Pionus senilis (Spix). White-crowned Parrot.

Psittacus senilis Spix, 1824, Avium Spec. Nov. Bras. 1: 42, pl. 31, fig. 1. (No locality given = Veracruz, Mexico.)

Habitat.—Montane Evergreen Forest, Tropical Lowland Evergreen Forest, Secondary Forest (0–1600 m; Tropical and Subtropical zones).

Distribution.—Resident on the Gulf-Caribbean slope of Middle America from southeastern San Luis Potosí and southern Tamaulipas south through eastern Mexico (including southern Campeche and southern Quintana Roo) and Central America to Costa Rica (both slopes) and western Panama (western Chiriquí and western Bocas del Toro).

Reports from southern Florida are based on escaped cage-birds (Stevenson and Anderson 1994).

Genus AMAZONA Lesson

Amazona Lesson, 1830, Traité Ornithol., livr. 3, p. 189. Type, by subsequent designation (Salvadori, 1891), C. farinosa = Psittacus farinosus Boddaert.

Notes.—Members of the genus *Amazona* are sometimes referred to under the group name Amazon.

Amazona albifrons (Sparrman). White-fronted Parrot.

Psittacus albifrons Sparrman, 1788, Mus. Carlson., fasc. 3, pl. 52. Based on the "White-crowned Parrot" Latham, Gen. Synop. Birds 1(1): 281. (No locality given = southwestern Mexico.)

Habitat.—Tropical Deciduous Forest, Tropical Lowland Evergreen Forest, Secondary Forest (0–1800 m; Tropical and Subtropical zones).

Distribution.—Resident from southern Sonora, Sinaloa, western Durango and south-eastern Veracruz south on the Gulf-Caribbean slope of Middle America (including the Yucatan Peninsula) to Honduras and on the Pacific slope to northwestern Costa Rica (Guanacaste).

Introduced and breeding in Puerto Rico (Mayaguez area) but establishment uncertain. Reports from southern Florida are based on escaped cage-birds (Stevenson and Anderson 1994).

Amazona xantholora (Gray). Yellow-lored Parrot.

Psittacus albifrons (not Sparrman) Kuhl, 1820, Consp. Psittacorum, p. 80. (No locality given.)

Chrysotis xantholora G. R. Gray, 1859, List Birds Brit. Mus., pt. 3(2), p. 83. New name for Psittacus albifrons "Latham" [= Kuhl], preoccupied. (Honduras = probably Belize.)

Habitat.—Tropical Deciduous Forest, Secondary Forest (Tropical Zone).

Distribution.—Resident throughout the Yucatan Peninsula (including Cozumel Island), in Belize, and (formerly) on Isla Roatán (in the Bay Islands, Honduras).

Amazona leucocephala (Linnaeus). Cuban Parrot.

Psittacus leucocephalus Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 100. Based mainly on "The White-headed Parrot" Edwards, Nat. Hist. Birds 4: 166, pl. 166. (in America = eastern Cuba.)

Habitat.—Tropical Lowland Evergreen Forest, Montane Evergreen Forest, Tropical Deciduous Forest (0–800 m).

Distribution.—Resident in the Bahamas (Great Inagua and Abaco, formerly also on Long, Crooked, Acklin, and Fortune islands), Cuba, the Isle of Pines, and the Cayman Islands (Grand Cayman and Cayman Brac, formerly also Little Cayman).

Notes.—Sibley and Monroe (1990) considered A. leucocephala, A. collaria, and A. ventralis to constitute a superspecies.

Amazona collaria (Linnaeus). Yellow-billed Parrot.

Psittacus collarius Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 102. Based on Psittacus minor, collo miniaceo Sloane, Voy. Jamaica 2: 297. (in America = Jamaica.)

Habitat.—Montane Evergreen Forest, Tropical Lowland Evergreen Forest (0-1200 m). Distribution.—Resident on Jamaica.

Amazona ventralis (Müller). Hispaniolan Parrot.

Psittacus ventralis P. L. S. Müller, 1776, Natursyst., Suppl., p. 79. Based on "Perroquet à ventre pourpre, de la Martinique" Daubenton, Planches Enlum., pl. 548. (Martinique, error = Hispaniola.)

Habitat.—Montane Evergreen Forest, Tropical Lowland Evergreen Forest (0–1500 m). **Distribution**.—Resident on Hispaniola (including Gonâve, Grand Cayemite, Beata and Saona islands).

Introduced and established on Puerto Rico and in the Virgin Islands (St. Croix and St. Thomas).

Reports from southern Florida are based on escaped cage-birds (Stevenson and Anderson 1994).

Amazona vittata (Boddaert). Puerto Rican Parrot.

Psittacus vittatus Boddaert, 1783, Table Planches Enlum., p. 49. Based on "Perroquet de St. Domingue" Daubenton, Planches Enlum., pl. 792. (Santo Domingo, error = Puerto Rico.)

Habitat.—Montane Evergreen Forest (0-900 m).

Distribution.—Resident on Puerto Rico (a small population surviving in the Luquillo National Forest and vicinity), and formerly also Culebra Island.

Amazona agilis (Linnaeus). Black-billed Parrot.

Psittacus agilis Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 99. Based on "The Little Green Parrot" Edwards, Nat. Hist. Birds 4: 168, pl. 168. (in America = Jamaica.)

Habitat.—Montane Evergreen Forest, Tropical Lowland Evergreen Forest (500–1600 m). Distribution.—Resident at higher elevations in western Jamaica (absent from Blue and John Crow mountains in eastern Jamaica).

Amazona viridigenalis (Cassin). Red-crowned Parrot.

Chrysotis viridigenalis Cassin, 1853, Proc. Acad. Nat. Sci. Philadelphia 6: 371. (South America, error = northeastern Mexico.)

Habitat.—Tropical Lowland Evergreen Forest, Gallery Forest, Pine-Oak Forest (0-1200 m; Tropical and lower Subtropical zones).

Distribution.—Resident in eastern Nuevo León, Tamaulipas, San Luis Potosí and extreme northeastern Veracruz.

A breeding population in southern Texas (lower Rio Grande Valley, recorded northwest to Falcon Dam) is most likely established from escapes from captivity, but a wild origin for some of the individuals cannot be ruled out. Introduced and established in southern Florida (Dade and Monroe counties), and Puerto Rico; a small group has also persisted since 1970 in the Hawaiian Islands (on Oahu).

Notes.—Also known as Green-cheeked Parrot. Amazona viridigenalis and A. finschi are closely related and, along with South American A. tucumana (Cabanis), 1885, and A. pretrei (Temminck), 1830, appear to constitute a superspecies (Sibley and Monroe 1990).

Amazona finschi (Sclater). Lilac-crowned Parrot.

Chrysotis finschi Sclater, 1864, Proc. Zool. Soc. London, p. 298. (Mexico = Tehuantepec City, Oaxaca; Binford, 1989, Ornithol. Monogr. 43, p. 337.)

Habitat.—Pine-Oak Forest, Tropical Lowland Evergreen Forests, Tropical Deciduous Forests (0–2200 m; Tropical and Subtropical zones).

Distribution.—Resident on the Pacific slope of western Mexico from southeastern Sonora and southwestern Chihuahua south to Oaxaca (the Isthmus of Tehuantepec).

Reports from southern Florida are based on escaped cage-birds.

Notes.—See comments under A. viridigenalis.

Amazona autumnalis (Linnaeus). Red-lored Parrot.

Psittacus autumnalis Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 102. Based on "The Lesser Green Parrot" Edwards, Nat. Hist. Birds 4: 164, pl. 164. (in America = southern Mexico.)

Habitat.—Edge of Tropical Lowland Forests, Tropical Deciduous Forest, Gallery Forest, Secondary Forest (0-1100 m; Tropical and lower Subtropical zones).

Distribution.—Resident [autumnalis group] from Tamaulipas and southeastern San Luis Potosí south on the Gulf-Caribbean slope (including southern Campeche, but absent from

the remainder of the Yucatan Peninsula) to Honduras (including the Bay Islands); most Nicaraguan birds are intermediate between this and the following group; [salvini group] in eastern Nicaragua and on Isla Ometepe in Lago de Nicaragua, on both slopes of Costa Rica (on the Pacific mainly in the southwestern region) and Panama (including Coiba and the Pearl islands), and in South America in northern and western Colombia, western Ecuador and northwestern Venezuela; and [diadema group] in the upper Amazon basin of Brazil.

Reports from southern Florida are based on escaped cage-birds (Stevenson and Anderson 1994).

Notes.—Also known as Yellow-cheeked Parrot. Groups: *A. autumnalis* [Yellow-cheeked Parrot], *A. salvini* (Salvadori, 1891) [Salvin's Parrot], and *A. diadema* (Spix, 1824) [Diademed Parrot].

Amazona farinosa (Boddaert). Mealy Parrot.

Psittacus farinosus Boddaert, 1783, Table Planches Enlum., p. 52. Based on "Le Perroquet Meunier de Cayenne" Daubenton, Planches Enlum., pl. 861. (Cayenne.)

Habitat.—Tropical Lowland Evergreen Forest (0–1200 m; Tropical and lower Subtropical zones).

Distribution.—Resident from southern Veracruz, northern Oaxaca and southern Campeche south on the Gulf-Caribbean slope (except the remainder of the Yucatan Peninsula) to Nicaragua (including north-central highlands), on both slopes of Costa Rica and Panama (including Isla Coiba and other islets), and in South America from Colombia and Venezuela south, west of the Andes to western Ecuador and east of the Andes to central Bolivia and central Brazil.

Reports from southern Florida are based on escaped cage-birds (Stevenson and Anderson 1994).

Notes.—Also known as Blue-crowned Parrot.

Amazona oratrix Ridgway. Yellow-headed Parrot.

Chrysotis levaillantii (not Amazona levaillantii Lesson, 1831) G. R. Gray, 1859, List Birds Brit. Mus., pt. 3(2), p. 79. ([probably Santo Domingo] Petapa, Oaxaca; Binford, 1989, Ornithol. Monogr. 43, p. 337.)

Amazona oratrix Ridgway, 1887, Man. N. Amer. Birds, p. 587. New name for Chrysotis levaillantii Gray, preoccupied.

Habitat.—Tropical Deciduous Forest, Gallery Forest, Tropical Lowland Evergreen Forest (0–700 m; Tropical Zone).

Distribution.—Resident on the Pacific slope of Mexico (including Tres Marias Islands) from Colima to Oaxaca (the Isthmus of Tehuantepec); on the Gulf slope of northeastern Mexico from southern Nuevo León and Tamaulipas south to Veracruz and Tabasco; and in Belize; a sight report from northeastern Guatemala.

Introduced and possibly established in Puerto Rico and southern Florida (Dade County). Notes.—Although A. oratrix and A. auropalliata are frequently considered conspecific with A. ochrocephala, the close approach of A. oratrix and A. auropalliata in Pacific Oaxaca without evidence of interbreeding (Binford 1989), and the presence of both A. auropalliata and A. ochrocephala in Caribbean Honduras, suggest that the best treatment would be as allospecies of a superspecies complex (Monroe and Howell 1966). Losada and Howell (1996), however, suggested that species limits should be re-evaluated because of misunderstanding of plumage variation in Caribbean lowland populations. With a single species, Yellow-headed Parrot is the appropriate name.

Amazona auropalliata (Lesson). Yellow-naped Parrot.

Psittacus (amazona) [sic] auro-palliatus Lesson, 1842, Rev. Zool. [Paris] 5: 135. (Realejo, centre Amérique [= Nicaragua].)

Habitat.—Tropical Deciduous Forest, Gallery Forest, Secondary Forest, lowland pine savanna (0-600 m; Tropical Zone).

Distribution.—Resident on the Pacific slope of Middle America from extreme south-eastern Oaxaca south to northwestern Costa Rica (Guanacaste); in the Sula Valley of northern Honduras (where possibly introduced); in the Bay Islands off Caribbean Honduras (Roatán, Barbareta and Guanaja); and the Mosquitia in eastern Honduras and northeastern Nicaragua.

Reports from southern Florida are based on escaped cage-birds (Stevenson and Anderson 1994).

Notes.—See comments under A. oratrix.

Amazona ochrocephala (Gmelin). Yellow-crowned Parrot.

Psittacus ochrocephalus Gmelin, 1788, Syst. Nat. 1(1): 339. Based in part on "Le Perroquet Amazone du Brésil" Brisson, Ornithologie 4: 272, pl. 26, fig. 1. (in America australi = Venezuela.)

Habitat.—River-edge Forest, Gallery Forest, Tropical Deciduous Forest (0–850 m; Tropical and lower Subtropical zones).

Distribution.—Resident in the Sula Valley of northern Honduras (at least formerly, where present since at least mid-19th Century, apparently a native population); and from Panama (including Coiba and the Pearl islands), Colombia, Venezuela, Trinidad (probably), and the Guianas south, east of the Andes, to central Bolivia and Amazonian Brazil.

Introduced and established on Puerto Rico; reports from southern Florida are based on escaped cage-birds (Stevenson and Anderson 1994).

Notes.—See comments under A. oratrix.

Amazona arausiaca (Müller). Red-necked Parrot.

Psittacus arausiacus P. L. S. Müller, 1766, Natursyst., Suppl., p. 79. Based on the "Blue-faced Green Parrot" Edwards, Glean. Nat. Hist. 1: 43, pl. 230. (Dominica.)

Habitat.—Tropical Lowland Evergreen Forest, Montane Evergreen Forest (0-1200 m). Distribution.—Resident on Dominica, in the Lesser Antilles, surviving in reduced numbers.

Notes.—Species of *Amazona* may also have been present on Martinique and Guadeloupe, for which names have been proposed although no specimens exist (see Appendix).

Amazona versicolor (Müller). St. Lucia Parrot.

Psittacus versicolor P. L. S. Müller, 1776, Natursyst., Suppl., p. 78. Based on "Perroquet, de la Havane" Daubenton, Planches Enlum., pl. 360. (Havana, error = St. Lucia.)

Habitat.—Tropical Lowland Evergreen Forest (0–1000 m).

Distribution.—Resident on St. Lucia, in the Lesser Antilles, where surviving in much reduced numbers.

Notes.—See comments under A. arausiaca.

Amazona guildingii (Vigors). St. Vincent Parrot.

Psittacus Guildingii Vigors, 1837, Proc. Zool. Soc. London (1836), p. 80. (St. Vincent [Lesser Antilles].)

Habitat.—Montane Evergreen Forest, Tropical Lowland Evergreen Forest (0-1000 m). Distribution.—Resident on St. Vincent, in the Lesser Antilles.

Amazona imperialis Richmond. Imperial Parrot.

Psittacus augustus (not Shaw, 1792) Vigors, 1837, Proc. Zool. Soc. London (1836), p. 80. (South America, error = Dominica.)

Amazona imperialis (Ridgway MS) Richmond, 1899, Auk 16: 186 (in text). New name for Psittacus augustus Vigors, preoccupied.

Habitat.—Montane Evergreen Forest (500–1400 m).

Distribution.—Resident on Dominica, in the Lesser Antilles, where surviving in small numbers.

Order **CUCULIFORMES**: Cuckoos and Allies

Family CUCULIDAE: Cuckoos, Roadrunners, and Anis

Notes.—Sibley and Ahlquist (1990) treated each of the subfamilies at the family level. Hughes (1996) proposed a realignment of the some genera on the basis of behavioral and skeletal characters.

Subfamily CUCULINAE: Old World Cuckoos

Genus CUCULUS Linnaeus

Cuculus Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 110. Type, by tautonymy, Cuculus canorus Linnaeus (Cuculus, prebinomial specific name, in synonymy).

Cuculus canorus Linnaeus. Common Cuckoo.

Cuculus canorus Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 110. (in Europa = Sweden.)

Habitat.—Open woodland, forest edge and clearings, taiga, open country with scattered trees and, occasionally, treeless regions with bushy growth.

Distribution.—Breeds from the British Isles, Scandinavia, northern Russia and northern Siberia south to northern Africa, the Mediterranean region, Asia Minor, the Himalayas, Burma, Southeast Asia and eastern China.

Winters in Africa, India, Southeast Asia, the East Indies, New Guinea and the Philippines, casually to the eastern Atlantic islands, Sri Lanka, and the Bonin, Molucca and Palau islands in the western Pacific.

Migrates through the Mediterranean region, Arabia, Taiwan, the Ryukyu Islands, Japan and the Kuril Islands to Kamchatka and Anadyrland, ranging casually to the Commander Islands and western and central Aleutian Islands (from Attu to Adak), occasionally reaching the Pribilof Islands (St. Paul) islands, St. Lawrence Island, and the mainland of western Alaska (Tutakoke River mouth and Seward Peninsula, near Nome), casually also to Iceland and the Faeroe Islands.

Accidental in Massachusetts (Martha's Vineyard), the Lesser Antilles (Barbados), and Greenland.

Notes.—Known in Old World literature as the Cuckoo. *Cuculus canorus* and the African *C. gularis* Stephens, 1815, constitute a superspecies (Cramp 1985).

Cuculus saturatus Blyth. Oriental Cuckoo.

Cuculus saturatus (Hodgson MS) Blyth, 1843, J. Asiat. Soc. Bengal 12: 942. (Nepal.)

Habitat.—Forested regions, primarily coniferous, less frequently deciduous woodland or mixed coniferous-deciduous areas, locally in montane forest.

Distribution.—Breeds [saturatus group] from central Russia, central Siberia, Anadyrland and Kamchatka south to the Himalayas, northern Burma, southern China, Taiwan and Japan. Resident [lepidus group] in southeast Asia and western Indonesia.

Winters [saturatus group] from the Malay Peninsula and Philippines south through Indonesia and New Guinea to northern and eastern Australia and Lord Howe Island.

Wanders [saturatus group] casually to the western Aleutian Islands (Attu, Rat Islands), the Pribilof Islands (St. Paul), St. Lawrence Island, and (once) to the western Alaskan mainland (Cape Prince of Wales).

Notes.—Also known as Himalayan Cuckoo. Groups: C. saturatus [Oriental Cuckoo] and C. lepidus Müller, 1845 [Sunda Cuckoo].

Subfamily COCCYZINAE: New World Cuckoos

Genus COCCYZUS Vieillot

Coccyzus Vieillot, 1816, Analyse, p. 28. Type, by monotypy, "Coucou de la Caroline" Buffon = Cuculus americanus Linnaeus.

Coccyzus erythropthalmus (Wilson). Black-billed Cuckoo.

Cuculus erythropthalma [sic] Wilson, 1811, Amer. Ornithol. 4: 16, pl. 28, fig. 2. (No locality given = probably near Philadelphia, Pennsylvania.)

Habitat.—Forest edge and open woodland, both deciduous and coniferous, with dense deciduous thickets (breeding); scrub (arid or humid) as well as forest, although most frequently in lowland humid regions (nonbreeding).

Distribution.—*Breeds* from east-central and southeastern Alberta, southern Saskatchewan, southern Manitoba, northern Minnesota, central Ontario, southwestern Quebec, New Brunswick, Prince Edward Island and Nova Scotia south, at least locally, to Montana (rarely in west), southeastern Wyoming, eastern Colorado, Nebraska, Kansas, north-central Oklahoma, north-central Texas (once successfully in southern Texas), northern Arkansas (rare), Tennessee, northern Alabama, and the Carolinas.

Winters in South America (including Trinidad) from northern Colombia and northern Venezuela south to central Bolivia (limits of winter range poorly known).

Migrates regularly through the southeastern United States, Bermuda, Mexico (primarily from Guerrero, Guanajuato and Tamaulipas southward, mostly in Gulf-Caribbean lowlands, including Cozumel Island) and Middle America (not recorded El Salvador); and casually west to the Pacific region from southeastern British Columbia south to southern California, Arizona, Sinaloa and New Mexico, and through the Bahamas (Grand Bahama, New Providence) and the Antilles (recorded Cuba, the Isle of Pines, Jamaica, Puerto Rico and Barbuda).

Casual or accidental in Newfoundland, Paraguay, northern Argentina, Greenland, Iceland, the British Isles, continental Europe, and the Azores.

Coccyzus americanus (Linnaeus). Yellow-billed Cuckoo.

Cuculus americanus Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 111. Based on "The Cuckoo of Carolina" Catesby, Nat. Hist. Carolina 1: 9, pl. 9. (in Carolina = South Carolina.)

Habitat.—Open woodland, especially where undergrowth is thick, parks and riparian woodland (breeding); forest, woodland, and scrub (nonbreeding).

Distribution.—Breeds from interior California (formerly north to western Washington), southern Idaho, Wyoming, southeastern Montana, the Dakotas, southern Manitoba (rarely), Minnesota, southern Ontario, southwestern Quebec and southern New Brunswick (probably) south to southern Baja California, southern Arizona, Chihuahua, Coahuila, Nuevo León, Tamaulipas, sporadically farther south in Mexico (recorded breeding in Zacatecas and Yucatán) the Gulf coast, the Florida Keys and the Greater Antilles (Cuba, Jamaica, Hispaniola, Gonâve Island, Puerto Rico, and St. Croix in the Virgin Islands), probably also in the Bahamas (Great Inagua) and Lesser Antilles (St. Kitts). In recent years, western distribution has contracted.

Winters from northern South America (also Tobago and Trinidad) south to northern Argentina, casually north to the southern United States.

Migrates regularly through the southern United States, Middle America, Bermuda, and the West Indies; regular in fall in Nova Scotia.

Casual or accidental north to southeastern Alaska (Ketchikan), southwestern British Columbia, central Alberta, southern Saskatchewan, southern Manitoba, Labrador, and Newfoundland, and on Clipperton Island, Greenland, Iceland, the British Isles, continental Europe and the Azores.

Notes.—C. americanus and C. euleri may form a superspecies (Mayr and Short 1970).

Coccyzus euleri Cabanis. Pearly-breasted Cuckoo.

Coccygus [sic] Euleri Cabanis, 1873, J. Ornithol. 21: 72. (Cantagallo, Rio de Janeiro, Brazil.)

Habitat.—Tropical Lowland Evergreen Forest, Gallery Forest, River-edge Forest (0–900 m). **Distribution.**—Breeds in southern South America presumably from eastern Brazil south to northern Argentina, and winters (possibly also locally breeding) in northern South America in Colombia, Venezuela and the Guianas.

Accidental in the northern Lesser Antilles (Sombrero Island, 1863) and Bolivia.

Notes.—Although *C. julieni* Lawrence, 1864 has priority over *C. euleri* (Banks 1988a), the former has been suppressed for purposes of priority by the I.C.Z.N. (1992). See comments under *C. americanus*.

Coccyzus minor (Gmelin). Mangrove Cuckoo.

Cuculus minor Gmelin, 1788, Syst. Nat. 1(1): 411. Based mainly on "Petit Vieillard" Buffon, Hist. Nat. Ois. 6: 401, and the "Mangrove Cuckoo" Latham, Gen. Synop. Birds 1(2): 537. (in Cayenna = Cayenne.)

Habitat.—Tropical Deciduous Forest, Gallery Forest, Mangrove Forest, Secondary Forest (0–1250 m; Tropical and, rarely, Subtropical zones).

Distribution.—Resident from Sinaloa and Tamaulipas south on both slopes of Middle America (including Holbox, Mujeres and Cozumel islands off the Yucatan Peninsula, and the Bay Islands off Honduras) to western Panama (Veraguas, Bocas del Toro); and from southern Florida (Tampa Bay and Miami areas southward in coastal areas, including the Florida Keys) and the Bahamas south throughout the Antilles (not recorded Isle of Pines) and islands in the western Caribbean Sea (Cayman, Swan, Providencia and San Andrés) to Venezuela (including islands from the Netherlands Antilles and Trinidad), the Guianas and northern Brazil.

Casual north to southeastern Texas (Port Bolivar, sight reports elsewhere) in northern and peninsular Florida (including the interior), and south to central Panama (Canal area and the Pearl Islands).

Notes.—Sibley and Monroe (1990) treated C. minor and C. ferrugineus as a superspecies.

Coccyzus ferrugineus Gould. Cocos Cuckoo.

Coccyzus ferrugineus Gould, 1843, Proc. Zool. Soc. London, p. 105. (Cocos Island.)

Habitat.—Tropical Lowland Evergreen Forest.

Distribution.—Resident on Cocos Island, off Costa Rica.

Notes.—See comments under C. minor.

Coccyzus melacoryphus Vieillot. Dark-billed Cuckoo.

Coccyzus melacoryphus Vieillot, 1817, Nouv. Dict. Hist. Nat. 8: 271. (Paraguay.)

Habitat.—Tropical Deciduous Forest, Gallery Forest, Secondary Forest, River-edge Forest, Tropical Lowland Evergreen Forest (0-1200 m).

Distribution.—Resident in South America (including Trinidad and the Galapagos Islands), the more southerly populations migratory northward in winter.

Accidental on Clipperton Island (13 August 1958; Stager 1964), in Grenada (Levera Pond, 26 May 1963; Schwartz and Klinikowski 1965), and in Panama (Tocumen, eastern Panamá province, 26 January 1980; Ridgely and Gwynne 1989). A specimen record from southern Texas is under review.

Genus SAUROTHERA Vieillot

Saurothera Vieillot, 1816, Analyse, p. 28. Type, by monotypy, "Coucou à long bec" Buffon = Cuculus vetula Linnaeus.

Saurothera merlini d'Orbigny. Great Lizard-Cuckoo.

Saurothera merlini d'Orbigny, 1839, in La Sagra, Hist. Fis. Pol. Nat. Cuba, Ois., p. 152 [p. 115 in Spanish edition], pl. 25. (Cuba.)

Habitat.—Tropical Lowland Evergreen Forest, Tropical Deciduous Forest, Secondary Forest (0-1200 m).

Distribution.—Resident in the northern Bahamas (Andros, New Providence and Eleuthera), Cuba (including Cayo Santa Maria and Cayo Coco), and the Isle of Pines.

Saurothera vetula (Linnaeus). Jamaican Lizard-Cuckoo.

Cuculus Vetula Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 111. Based mainly on Cuculus major Sloane, Voy. Jamaica 2: 312, pl. 258. (in Jamaica.)

Habitat.—Tropical Lowland Evergreen Forest, Tropical Deciduous Forest (0-1200 m). Distribution.—Resident on Jamaica.

Notes.—S. vetula, S. vieilloti, and S. longirostris have been treated as conspecific (e.g., Peters 1940); they constitute a superspecies (Sibley and Monroe 1990).

Saurothera longirostris (Hermann). Hispaniolan Lizard-Cuckoo.

Cuculus longirostris Hermann, 1783, Tabula Affinit. Anim., p. 186. (Hispaniola.)

Habitat.—Tropical Lowland Evergreen Forest, Tropical Deciduous Forest (0–2000 m). **Distribution.**—*Resident* on Hispaniola (including Tortue, Saona and Gonâve islands). **Notes.**—See comments under *S. vetula*.

Saurothera vieilloti Bonaparte. Puerto Rican Lizard-Cuckoo.

Saurothera vetula (not Linnaeus, 1758) Vieillot, 1819, Nouv. Dict. Hist. Nat. (nouv. éd.) 32: 348. (Porto Rico = Puerto Rico.)

Saurothera vieilloti Bonaparte, 1850, Consp. Gen. Avium 1(1): 97. New name for Saurothera vetula Vieillot, preoccupied.

Habitat.—Tropical Lowland Evergreen Forest, Tropical Deciduous Forest (0–800 m). **Distribution.**—Resident on Puerto Rico and (formerly) Vieques Island, possibly at one time on St. Thomas in the Virgin Islands.

Notes.—See comments under S. vetula.

Genus HYETORNIS Sclater

Ptiloleptis (not Ptiloleptus Swainson, 1837, emended to Ptiloleptis by G. R. Gray, 1849)
Bonaparte, 1854, Ateneo Ital. 2: 121. Type, by monotypy, Cuculus pluvialis Gmelin.
Hyetornis Sclater, 1862, Cat. Collect. Amer. Birds, pp. xiii, 321. New name for Ptiloleptis Bonaparte, preoccupied.

Notes.—Hyetornis was merged with Piaya by Peters (1940).

Hyetornis rufigularis (Hartlaub). Bay-breasted Cuckoo.

Coccyzus rufigularis "Herz. c. Württemb." Hartlaub, 1852, Naumannia 2: 55. (Mountain forests of Spanish Santo Domingo = Dominican Republic.)

Habitat.—Tropical Deciduous Forest, Tropical Lowland Evergreen Forest (0–900 m). **Distribution.**—Resident on Hispaniola (primarily the Dominican Republic, rare in Haiti) and Gonâve Island.

Hyetornis pluvialis (Gmelin). Chestnut-bellied Cuckoo.

Cuculus pluvialis Gmelin, 1788, Syst. Nat. 1(1): 411. Based in part on the "Old man or rainbird" Sloane, Voy. Jamaica 2: 321, pl. 258, fig. 1. (in Jamaica.)

Habitat.—Tropical Lowland Evergreen Forest, Secondary Forest (0-1500 m). Distribution.—Resident on Jamaica.

Genus PIAYA Lesson

Piaya Lesson, 1830, Traité Ornithol., livr. 2, p. 139. Type, by original designation, Cuculus cayanus Gmelin [= Linnaeus].

Piaya cayana (Linnaeus). Squirrel Cuckoo.

Cuculus cayanus Linnaeus, 1766, Syst. Nat. (ed. 12) 1: 170. Based on "Le Coucou de Cayenne" Brisson, Ornithologie 4: 122, pl. 8, fig. 2. (in Cayana = Cayenne.)

Habitat.—Tropical Lowland Evergreen Forest, Tropical Deciduous Forest, Secondary Forest, Gallery Forest, River-edge Forest (0–2500 m; Tropical and Subtropical zones).

Distribution.—Resident from southern Sonora, southwestern Chihuahua, southeastern San Luis Potosí and southern Tamaulipas south through Middle America (including the Yucatan Peninsula, casually Isla Cancun, but doubtfully recorded from Holbox and Mujeres islands), and in South America from Colombia, Venezuela, Trinidad, and the Guianas south, west of the Andes to northwestern Peru and east of the Andes to southern Bolivia, northern Argentina, and Uruguay.

Piaya minuta (Vieillot). Little Cuckoo.

Coccyzus minutus Vieillot, 1817, Nouv. Dict. Hist. Nat. (nouv. éd.) 8: 275. Based in part on "Le petit Coucou de Cayenne" Brisson, Ornithologie 4: 124, pl. 16, fig. 2. (No locality given = Cayenne.)

Habitat.—Tropical Lowland Evergreen Forest Edge, Secondary Forest, Second-growth Scrub (0–900; Tropical Zone).

Distribution.—Resident from eastern Panama (from Canal area and eastern Panamá province eastward), Colombia, Venezuela, Trinidad and the Guianas south, east of the Andes, to central Bolivia and Amazonian and south-central Brazil.

Subfamily NEOMORPHINAE: Ground-Cuckoos and Roadrunners

Genus TAPERA Thunberg

Tapera Thunberg, 1819, Göteborgs Kungl. Vetensk. Vitterhets-Samh. Handl. 3: 1. Type, by monotypy, Tapera brasiliensis Thunberg = Cuculus naevius Linnaeus.

Tapera naevia (Linnaeus). Striped Cuckoo.

Cuculus nævius Linnaeus, 1766, Syst. Nat. (ed. 12) 1: 170. Based on "Le Coucou tacheté de Cayenne" Brisson, Ornithologie 4: 127, pl. 9, fig. 1. (in Cayania = Cayenne.)

Habitat.—Second-growth Scrub, Low Seasonally Wet Grassland, Riparian Thickets (0–1500 m; Tropical and lower Subtropical zones).

Distribution.—Resident from central Veracruz, northern Oaxaca, Tabasco, Chiapas and southern Quintana Roo south along both slopes of Middle America, and in South America from Colombia, Venezuela (including Margarita Island), Trinidad and the Guianas south, west of the Andes to northwestern Peru, and east of the Andes to northern Argentina and southern Brazil.

Genus DROMOCOCCYX Wied

Dromococcyx Wied, 1832, Beitr. Naturgesch. Bras. 4(1): 351. Type, by monotypy, Macropus phasianellus Spix.

Dromococcyx phasianellus (Spix). Pheasant Cuckoo.

Macropus phasianellus Spix, 1824, Avium Spec. Nov. Bras. 1: 53, pl. 42. (forest of Rio Tonantins, Amazon Valley, Brazil.)

Habitat.—Tropical Lowland Evergreen Forest, River-edge Forest, Tropical Deciduous Forest (0–1600 m; Tropical Zone.)

Distribution.—Resident on both slopes of Middle America from Guerrero, Puebla, Oaxaca, southeastern Veracruz, Chiapas and the Yucatan Peninsula south to Panama, and in South America from Colombia, Venezuela and the Guianas south, east of the Andes, to central Bolivia, Paraguay, northeastern Argentina, and southeastern Brazil.

Genus MOROCOCCYX Sclater

Morococcyx Sclater, 1862, Cat. Collect. Amer. Birds, p. 322. Type, by monotypy, Coccyzus erythropyga Lesson.

Morococcyx erythropygus (Lesson). Lesser Ground-Cuckoo.

Coccyzus erythropyga Lesson, 1842, Rev. Zool. [Paris] 5: 210. (San-Carlos, Centre Amérique = La Unión, El Salvador.)

Habitat.—Arid Lowland Scrub, Tropical Deciduous Forest Edge, Second-growth Scrub (0–1500 m; Tropical Zone).

Distribution.—Resident on the Pacific slope of western Mexico from southern Sinaloa south to northwestern Costa Rica (Río Grande de Tárcoles), occurring also in the arid interior valleys on the Caribbean slope of Guatemala (Motagua) and Honduras (Quimistán, Sula, Comayagua, Aguán).

Genus GEOCOCCYX Wagler

Geococcyx Wagler, 1831, Isis von Oken, col. 524. Type, by monotypy, Geococcyx variegata Wagler = Saurothera californiana Lesson.

Geococcyx velox (Wagner). Lesser Roadrunner.

Cuculus velox A. Wagner, 1836, Gelehrte Anz., München 3: col. 96. (Mexico = outskirts of Mexico City.)

Habitat.—Arid Lowland Scrub, Arid Montane Scrub, Pine Forest (0–2800 m; Tropical and Subtropical zones).

Distribution.—Resident in western Mexico from extreme southern Sonora south to Chiapas (Tuxtla Guttiérez), and in the interior of Middle America from eastern Nayarit, Jalisco, Michoacán, México, Morelos, Puebla, west-central Veracruz and Oaxaca south through Central America to central Nicaragua; an isolated population in Yucatán and northern Campeche.

Geococcyx californianus (Lesson). Greater Roadrunner.

Saurothera Californiana Lesson, 1829, Oeuvres Compl. Buffon 6: 420. (Californie = San Diego, California.)

Habitat.—Desert scrub, chaparral, edges of cultivated lands, and arid open situations with scattered brush, locally in cedar glades and pine-oak woodland (Tropical and Subtropical zones).

Distribution.—Resident from north-central California, western and central Nevada, southern Utah, southern Colorado, southern Kansas, central and eastern Oklahoma, southwestern Missouri, central and western Arkansas and western and north-central Louisiana south to southern Baja California, Sinaloa, Durango, Zacatecas, northeastern Jalisco, eastern Michoacán, México, Puebla, Veracruz, northern Tamaulipas and the Gulf coast of Texas.

Notes.—Often called the Roadrunner in American literature.

Genus NEOMORPHUS Gloger

Neomorphus Gloger, 1827, in Froriep, Notizen 16: col. 278, note. Type, by original designation, Coccyzus geoffroyi Temminck.

Neomorphus geoffroyi (Temminck). Rufous-vented Ground-Cuckoo.

Coccyzus geoffroyi Temminck, 1820, Planches Color., livr. 2, pl. 7. (No locality given = Pará, Brazil.)

Habitat.—Tropical Lowland Evergreen Forest (0–1200 m; Tropical and lower Subtropical zones).

Distribution.—Resident locally in Nicaragua (Caribbean slope), Costa Rica (primarily Caribbean slope, on Pacific drainage in Cordillera de Guanacaste), and Panama (both slopes), and in South America from Colombia south, east of the Andes, to central Bolivia and Amazonian Brazil.

Notes.— Sibley and Monroe (1990) considered *N. geoffroyi* and Amazonian *N. squamiger* Todd, 1925 [Scaled Ground-Cuckoo] to constitute a superspecies.

Subfamily CROTOPHAGINAE: Anis

Genus CROTOPHAGA Linnaeus

Crotophaga Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 105. Type, by monotypy, Crotophaga ani Linnaeus.

Crotophaga major Gmelin. Greater Ani.

Crotophaga major Gmelin, 1788, Syst. Nat. 1(1): 363. Based in part on "Le grand Bout-de-petun" Brisson, Ornithologie 4: 180, pl. 18, fig. 2, and Daubenton, Planches Enlum., pl. 102, fig. 1. (in Cayenna = Cayenne.)

Habitat.—River-edge Forest, Gallery Forest, Freshwater Marshes (0–800 m; Tropical Zone, locally to Temperate Zone).

Distribution.—Resident from eastern Panama (on the Caribbean slope from western Colón eastward, on the Pacific from the Canal area eastward), Colombia, Venezuela, Trinidad and the Guianas south, west of the Andes to western Ecuador and east of the Andes virtually throughout to northern Argentina. Two specimens taken along the Río Tamesí, southern Tamaulipas, may represent a resident population in northeastern Mexico (Olson 1978), but subsequent searches for the species have failed.

Crotophaga ani Linnaeus. Smooth-billed Ani.

Crotophaga Ani Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 105. Based mainly on the "Razorbilled Blackbird" Catesby, Nat. Hist. Carolina 2 (app.): 3, pl. 3, and Sloane, Voy. Jamaica 2: 298, pl. 256, fig. 1. (in America, Africa = Jamaica.)

Habitat.—Second-growth Scrub, Agricultural Pastures/Cropland (0–2000 m; Tropical and lower Subtropical zones).

Distribution.—Resident in central and southern Florida (Tampa Bay and Merritt Island region southward, mainly from Lake Okeechobee area to Dade County); from the Bahamas south throughout the Antilles (including the Cayman Islands); on islands off Quintana Roo (Cozumel), Belize (Ambergris Cay), Honduras (Swan and Bay islands) and Nicaragua (Corn, Providencia and San Andrés); and in southwestern Costa Rica (Pacific slope north to the Gulf of Nicoya region) and Panama (both slopes, including Coiba and the Pearl islands), and in South America from Colombia, Venezuela (including Margarita Island), Tobago, Trinidad and the Guianas south, west of the Andes to western Ecuador and east of the Andes to northern Argentina.

Casual north to North Carolina, in northern Florida, and to the mainland of Honduras (Trujillo region, where possibly breeding). Accidental in Ohio. Reports from Louisiana, Indiana, and New Jersey are questionable.

Crotophaga sulcirostris Swainson. Groove-billed Ani.

Crotophaga sulcirostris Swainson, 1827, Philos. Mag. (n.s.) 1: 440. (Table land. Temiscaltepec = Temascaltepec, México.)

Habitat.—Second-growth Scrub, Riparian Thickets (0-2300 m; Tropical and Subtropical zones).

Distribution.—Resident in southern Baja California (Cape district, formerly, with one recent report of a vagrant); from southern Sonora, central and southern (casually western, north-central and southeastern) Texas and southern Louisiana (rarely, one breeding record, Plaquemines Parish) south along both slopes of Middle America (including Mujeres, Holbox and Cozumel islands off Quintana Roo) and along both coasts of South America to extreme northern Chile and Guyana (also the Netherlands Antilles); and in northwestern Argentina.

Wanders regularly east along the Gulf coast to peninsular Florida, and casually northward to southern California, southern Nevada, northern Arizona, central New Mexico, Colorado, South Dakota, Minnesota, Wisconsin, Michigan, southern Ontario, Ohio, and Maryland. Accidental in the Revillagigedo Islands (Socorro Island; sight reports). Reports from Trinidad are erroneous (ffrench 1991).

Order STRIGIFORMES: Owls

Family TYTONIDAE: Barn Owls

Genus TYTO Billberg

Tyto Billberg, 1828, Synop. Faunae Scand. (ed. 2) 1(2): tab. A. Type, by monotypy, Strix flammea auct. = Strix alba Scopoli.

Tyto alba (Scopoli). Barn Owl.

Strix alba Scopoli, 1769, Annus I, Hist.-Nat., p. 21. (Ex Foro Juli = Friuli, northern Italy.)

Habitat.—Open and partly open country in a wide variety of situations, often around human habitation; nests in buildings, caves, crevices on cliffs, burrows and hollow trees, rarely in trees with dense foliage, such as palms (Tropical to Temperate zones).

Distribution.—Resident in the Americas from southwestern and south-central British Columbia, western Washington, Oregon, southern Idaho, Montana, North Dakota, Iowa, southern Wisconsin, southern Michigan (formerly), extreme southern Ontario, southern Quebec, New York, southern Vermont and Massachusetts south through the United States and Middle America (including many islands around Baja California and in the Gulf of California, the Tres Marías Islands, Bay Islands off Honduras, and Pearl Islands off Panama), Bermuda, the Bahamas, Greater Antilles (except Puerto Rico and the Virgin Islands) and Lesser Antilles (Dominica, St. Vincent, Grenada and the Grenadines), and in South America in the Galapagos Islands (Santa Cruz, Isabela, James, San Cristóbal and Fernandina) and from Colombia and Venezuela (including islands of the Netherlands Antilles, Tobago and Trinidad) south to Tierra del Fuego; and in the Old World from the British Isles, Baltic countries, southern Russia and southern Siberia south throughout most of Eurasia and Africa to southern Africa, Madagascar, the Malay Peninsula, the East Indies (except Sumatra, Borneo and the Philippines) and Australia, and east in the western Pacific to the Society Islands. Northernmost populations in North America are partially migratory, wintering south to southern Mexico and the West Indies.

Wanders casually north to northeastern British Columbia, southern Saskatchewan, southern Manitoba, northern Minnesota, New Brunswick, Newfoundland and Nova Scotia; a record from Alaska is erroneous.

Introduced and established in the Hawaiian Islands (in 1958, now on all main islands from Kauai eastward) and on Lord Howe Island.

Notes.—Also known as Common Barn-Owl. *Tyto alba* and the closely related *T. glaucops* are regarded as species because sympatry occurs on Hispaniola.

Tyto glaucops (Kaup). Ashy-faced Owl.

Strix glaucops Kaup, 1853, in Jardine, Contrib. Ornithol. (1852), p. 118. (Jamaica, error = Hispaniola.)

Habitat.—Arid Lowland Scrub, Arid Montane Scrub, Second-growth Scrub, nesting in limestone caves and sinkholes, and often foraging around old buildings and ruins (0–2000 m). **Distribution.**—Resident on Hispaniola.

Notes.—Also known as Hispaniolan Barn-Owl or Ashy-faced Barn-Owl. See comments under *T. alba*.

Family STRIGIDAE: Typical Owls

Genus OTUS Pennant

Otus Pennant, 1769, Indian Zool., p. 3. Type, by monotypy, Otus bakkamoena Pennant. Gymnasio Bonaparte, 1854, Rev. Mag. Zool. (2)6: 543. Type, by monotypy, Strix nudipes Daudin.

Gymnoglaux Cabanis, 1855, J. Ornithol. 3: 466. Type, by monotypy, Noctua nudipes Lembeye (not Strix nudipes Daudin) = Gymnoglaux lawrencii Sclater and Salvin.

Otus flammeolus (Kaup). Flammulated Owl.

Scops (Megascops) flammeola "Licht." Kaup, 1853, in Jardine, Contrib. Ornithol. (1852), p. 111. (Mexico.)

Habitat.—Montane forest, primarily open ponderosa pine association, occasionally aspen; in migration, wooded areas in lowlands and mountains (upper Subtropical and Temperate zones).

Distribution.—Breeds locally from south-central British Columbia (Kamloops, Penticton), central Washington, eastern Oregon, southern Idaho, western Montana and north-central Colorado south to south-central California (Palomar Mountain), southern Arizona, southern New Mexico and western Texas (Guadalupe, Chisos, and, probably, Davis mountains); also in Coahuila, Tamaulipas, Nuevo León, México (Chimalpa), and Veracruz (Las Vigas). A report of one heard in Oaxaca requires confirmation (Binford 1989).

Winters from central Mexico (Sinaloa, Jalisco, Michoacán and Distrito Federal) south in the highlands to Guatemala and El Salvador, casually north to southern California.

Migrates east to central Montana, central Colorado, eastern New Mexico and western Texas.

Casual or accidental in Wyoming, southeastern Texas (Galveston, Port Aransas), Louisiana (Baton Rouge), Alabama (Shelby County), Florida (Redington Beach) and the Gulf of Mexico (ca. 75 miles southeast of Galveston, Texas).

Notes.—Also known as Flammulated Screech-Owl. The Eurasian O. scops (Linnaeus, 1758) and O. flammeolus differ in vocalizations and are separate species (Marshall 1978); Mayr and Short (1970) considered them to represent a superspecies. Marshall and King (in Monroe and Sibley 1993) considered O. flammeolus as probably related to O. brucei (Hume, 1873) [Pallid Scops-Owl].

Otus sunia (Hodgson). Oriental Scops-Owl.

Scops sunia Hodgson, 1836, Asiat. Res. 19: 175. (Nepal.)

Habitat.—Forest and woodland.

Distribution.—Breeds from the northern limit of trees in northeastern Asia and the large islands of Japan south to northern China and Korea. Winters from southeastern China and Japan south to Southeast Asia.

Accidental in Alaska in the Aleutian Islands on Buldir (5 June 1977) and Amchitka (late June 1979).

Notes.—O. sunia and other Old World forms are sometimes merged in the Eurasian O. scops (Linnaeus, 1758), but studies of vocalizations and behavior confirm their status as species (Marshall 1967, 1978). See comments under O. flammeolus.

Otus kennicottii (Elliot). Western Screech-Owl.

Scops Kennicottii Elliot, 1867, Proc. Acad. Nat. Sci. Philadelphia 19: 99. (Sitka, Alaska.)

Habitat.—Woodland, especially oak and riparian woodland, and giant cacti (Subtropical and Temperate zones).

Distribution.—Resident [kennicottii group] from south-coastal (west to Cordova) and southeastern Alaska, coastal and south-central British Columbia, northern Idaho, western and south-central Montana, northwestern Wyoming (Wind River Mountains), southeastern Colorado, and extreme western Oklahoma south to southern Baja California, central Sonora, in the Mexican highlands through central and eastern Chihuahua and Coahuila as far as the Distrito Federal, and to south-central Texas (east to Kerr County); and [vinaceus group] in southern Sonora, western Chihuahua and northern Sinaloa.

Casual [kennicottii group] in Alberta and Kansas (Morton Co.).

Notes.—Also known as Kennicott's Screech-Owl. Groups: O. kennicottii [Western Screech-Owl) and O. vinaceus (Brewster, 1888) [Vinaceous Screech-Owl]. Relationships of

North and Middle American Otus are discussed in Marshall (1967), in which the four groups of O. asio are recognized on the basis of vocalizations and behavior as "incipient species"; these groups are now considered to be allospecies of a superspecies. Long-distance dispersal apparently accounts for overlap and rare mixed pairs in marginally poor habitat along the Arkansas River in southeastern Colorado and the Rio Grande in Texas. If these four species (O. kennicottii and the following three species) are treated as a single species, then O. asio and Common Screech-Owl are the appropriate scientific and English names, respectively. Intergradation of O. k. cardonensis Huey, 1926 and O. k. xantusi (Brewster, 1902) in Baja California is uncertain. The latter form may represent O. cooperi because of vocal similarities. Miller and Miller (1951) discussed the relationship of O. kennicottii and O. vinaceus, the latter formerly treated as a separate species. Because they are similar in voice and intergrade, they are regarded as conspecific.

Otus asio (Linnaeus). Eastern Screech-Owl.

Strix Asio Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 92. Based on "The Little Owl" Catesby, Nat. Hist. Carolina 1: 7, pl. 7. (in America = South Carolina.)

Habitat.—Open woodland, deciduous forest, open mixed deciduous-coniferous woodland, parklands, residential areas, and riparian woodland in drier regions.

Distribution.—Resident from southern Saskatchewan, southern Manitoba, central Minnesota, north-central Michigan, southern Ontario, southwestern Quebec and Maine (formerly) south through the eastern United States to Coahuila, central Nuevo León, eastern San Luis Potosí, southern Tamaulipas, southern Texas, the Gulf coast and southern Florida (upper Florida Keys), and west to central Montana, northern and eastern Wyoming, eastern Colorado, Kansas, western Oklahoma, and west-central Texas. Recorded in summer (and probably breeding) in central Alberta.

Casual in Nova Scotia (Indian Lake); sight reports from New Brunswick.

Notes.—Also known as the Screech Owl. See comments under O. kennicottii.

Otus seductus Moore. Balsas Screech-Owl.

Otus vinaceus seductus Moore, 1941, Proc. Biol. Soc. Wash. 54: 156. (5 miles northeast of Apatzingán, Michoacán, altitude 1000 feet.)

Habitat.—Tropical Deciduous Forest, mesquite (0–1200 m; Tropical and lower Subtropical zones).

Distribution.—Resident in Colima, southern Jalisco, the Río Balsas drainage of Michoacán, and western Guerrero.

Notes.—See comments under O. kennicottii.

Otus cooperi (Ridgway). Pacific Screech-Owl.

Scops cooperi Ridgway, 1878, Proc. U. S. Natl. Mus. 1: 116. (Santa Ana, Costa Rica.)

Habitat.—Tropical Deciduous Forest, Gallery Forest, Secondary Forest, Mangrove Forest, Tropical Lowland Evergreen Forest Edge (0–950 m; Tropical and Subtropical zones).

Distribution.—Resident along the Pacific coast of Middle America from Oaxaca (west to Puerto Angel region and Rancho Las Animas) south to northwestern Costa Rica (Guanacaste region).

Notes.—Also known as Cooper's Screech-Owl. See comments under O. kennicottii.

Otus trichopsis (Wagler). Whiskered Screech-Owl.

Scops trichopsis Wagler, 1832, Isis von Oken, col. 276. (Mexico = mountains of southwestern Puebla.)

Habitat.—Pine Forest, Pine-Oak Forest, (600-2950 m; Subtropical and lower Temperate zones).

Distribution.—Resident from southeastern Arizona, northeastern Sonora, southwestern New Mexico, Chihuahua, Coahuila, Nuevo León and Tamaulipas south through the moun-

tains of Mexico (west to Sinaloa, Nayarit, Jalisco, Michoacán and Guerrero, and east to west-central Veracruz), Guatemala, El Salvador and Honduras to northern Nicaragua.

Notes.—Also known as Whiskered Owl or Spotted Screech-Owl.

Otus choliba (Vieillot). Tropical Screech-Owl.

Strix choliba Vieillot, 1817, Nouv. Dict. Hist. Nat. (nouv. éd.) 7: 39. Based on "Chóliba" Azara, Apunt. Hist. Nat. Páx. Parag. 2: 218 (no. 48). (Paraguay.)

Habitat.—Secondary Forest, Tropical Lowland Evergreen Forest Edge, River-edge Forest, Gallery Forest (0–2800 m; Tropical and Subtropical zones).

Distribution.—Resident from central Costa Rica (San José region) south through Panama (including the Pearl Islands), and in South America from Colombia and Venezuela (including Margarita Island), Trinidad and the Guianas south, east of the Andes, to northern Argentina and Paraguay; erroneously reported from Honduras.

Otus barbarus (Sclater and Salvin). Bearded Screech-Owl.

Scops barbarus Sclater and Salvin, 1868, Proc. Zool. Soc. London, p. 56. (Verapaz, Guatemala.)

Habitat.—Pine Forest, Montane Evergreen Forest (1400–2200 m; Subtropical and Temperate zones).

Distribution.—Resident in the mountains of Chiapas and northern Guatemala. **Notes**.—Also known as Santa Barbara Screech-Owl or Bridled Screech-Owl.

Otus guatemalae (Sharpe). Vermiculated Screech-Owl.

Scops brasilianus Subsp. B. Scops guatemalæ Sharpe, 1875, Cat. Birds Brit. Mus. 2: ix, 112, pl. 9. (Central America, from Veraguas northwards to Mexico = Guatemala.)

Habitat.—Tropical Lowland Evergreen Forest, Montane Evergreen Forest, Secondary Forest, Tropical Deciduous Forest, Pine-Oak Forest (0–1800 m; Tropical and Subtropical zones).

Distribution.—Resident [guatemalae group] from southeastern Sonora and southern Tamaulipas south on both slopes of Mexico to Chiapas and the Yucatan Peninsula (including Cozumel Island), and thence south through Guatemala, Belize and Honduras to north-central Nicaragua; and [vermiculatus group] locally from northeastern Costa Rica and Panama and south locally to western Colombia.

Notes.—Includes O. guatemalae [Middle American Screech-Owl] and O. vermiculatus (Ridgway, 1887) [Vermiculated Screech-Owl], sometimes treated as separate species because of vocal differences (Sibley and Monroe 1990, Marshall et al. 1991). Marshall et al. (1991) proposed that populations of vermiculatus from northern South America, excluding those from western Colombia, be merged into O. atricapillus of South America, a treatment followed by Monroe and Sibley (1993), but see König (1994) and Heidrich et al. (1995a).

Otus clarkii Kelso and Kelso. Bare-shanked Screech-Owl.

Otus clarkii L. and E. H. Kelso, 1935, Biol. Leaflet, no. 5, [not paged]. (Calobre, Panama.)

Habitat.—Montane Evergreen Forest (900-3300 m; Subtropical and lower Temperate zones).

Distribution.—Resident in the mountains of Costa Rica (Cordillera Central eastward), Panama (recorded from western Chiriquí, Veraguas and eastern Darién) and extreme northwestern Colombia.

Notes.—Also known as Bare-legged Screech-Owl. Once called *Otus nudipes* in the literature, based on *Bubo nudipes* Vieillot, 1807, but the latter name is now regarded as a *nomen dubium*; furthermore, with the following species placed in *Otus, Bubo nudipes* is also a junior secondary homonym of *Strix nudipes*.

Otus nudipes (Daudin). Puerto Rican Screech-Owl.

Strix nudipes Daudin, 1800, Traité Ornithol. 2: 199. (Porto Rico and Cayenne = Puerto Rico.)

Habitat.—Tropical Lowland Evergreen Forest, Tropical Deciduous Forest (0–900 m). **Distribution.**—Resident on Puerto Rico (including Vieques and Culebra islands) and, very local or extirpated, in the Virgin Islands (St. Thomas, St. John, Tortola, Virgin Gorda and St. Croix).

Notes.—Also known as Puerto Rican Bare-legged Owl.

Otus lawrencii (Sclater and Salvin). Cuban Screech-Owl.

Gymnoglaux lawrencii Sclater and Salvin, 1868, Proc. Zool. Soc. London, p. 327, pl. 29. (Cuba = Remedios, Cuba.)

Habitat.—Tropical Lowland Evergreen Forest, Tropical Deciduous Forest; nests in holes in coconut palms and limestone cliffs.

Distribution.—Resident on Cuba, Cayo Romano, and the Isle of Pines.

Notes.—Formerly placed in monotypic genus Gymnoglaux and known as Bare-legged Owl.

Genus LOPHOSTRIX Lesson

Lophostrix Lesson, 1836, Oeuvres Compl. Buffon 7: 261. Type, by monotypy, Strix griseata Latham = Strix cristata Daudin.

Lophostrix cristata (Daudin). Crested Owl.

Strix cristata Daudin, 1800, Traité Ornithol. 2: 307. Based on "La Chouette à aigrette blanche" Levaillant, Ois. Afr. 1: 43. (Guiana.)

Habitat.—Tropical Lowland Evergreen Forest, Montane Evergreen Forest (0–1000 m) (Tropical and lower Subtropical zones).

Distribution.—Resident on both slopes of Middle America from southern Veracruz, northern and southeastern Oaxaca, and Chiapas) south to Panama, and in South America from Colombia, western Venezuela and the Guianas south, west of the Andes to western Ecuador and east of the Andes to central Bolivia and Amazonian Brazil.

Genus PULSATRIX Kaup

Pulsatrix Kaup, 1848, Isis von Oken, col. 771. Type, by monotypy, Strix torquata Daudin = Strix perspicillata Latham.

Pulsatrix perspicillata (Latham). Spectacled Owl.

Strix perspicillata Latham, 1790, Index Ornithol. 1: 58. Based on the "Spectacle Owl" Latham, Gen. Synop. Birds (suppl.) 1: 50, pl. 107. (in Cayana = Cayenne.)

Habitat.—River-edge Forest, Tropical Lowland Evergreen Forest, Gallery Forest, Secondary Forest, Tropical Deciduous Forest (0–1000 m; Tropical and lower Subtropical zones).

Distribution.—Resident on both slopes of Middle America from southern Veracruz, northern and southeastern Oaxaca, and Chiapas south to Panama, and in South America from Colombia, Venezuela, Trinidad and the Guianas south, west of the Andes to western Ecuador and east of the Andes to northwestern Argentina, Paraguay and southeastern Brazil.

Genus BUBO Duméril

Bubo Duméril, 1806, Zool. Anal., p. 34. Type, by tautonymy, Strix bubo Linnaeus.

Bubo virginianus (Gmelin). Great Horned Owl.

Strix virginiana Gmelin, 1788, Syst. Nat. 1(1): 287. Based mainly on the "Virginia Eared Owl" Latham, Gen. Synop. Birds 1(1): 119. (in omni America, etc. = Virginia.)

Habitat.—A wide variety of forested habitats, moist or arid, deciduous or evergreen lowland forest to open temperate woodland, including second-growth forest, swamps, orchards, parklands, riverine forest, brushy hillsides and semi-desert (Tropical to Alpine zones, most commonly Subtropical and Temperate zones).

Distribution.—Breeds from western and central Alaska, central Yukon, northwestern and southern Mackenzie, southern Keewatin, northern Manitoba, northern Ontario, northern Quebec, northern Labrador and Newfoundland south throughout the Americas (except the West Indies, most islands, and most of Amazonia) to Tierra del Fuego.

Winters generally throughout the breeding range, with the northernmost populations being partially migratory, wintering south to southern Canada and the northern United States.

Genus NYCTEA Stephens

Nyctea Stephens, 1826, in Shaw, Gen. Zool. 13(2): 62. Type, by tautonymy, Strix erminea Shaw = Strix nyctea Linnaeus = Strix scandiaca Linnaeus.

Nyctea scandiaca (Linnaeus). Snowy Owl.

Strix scandiaca Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 92. (in Alpibus Lapponiæ = Lapland.)

Habitat.—Tundra, primarily where mounds, hillocks, or rocks are present; in winter and migration, occurring also in open country such as prairie, marshes, fields, pastures, and sandy beaches.

Distribution.—Breeds in North America in the western Aleutians (Attu, Buldir), on Hall Island (in the Bering Sea), and from northern Alaska, northern Yukon (Herschel Island), and Banks, Prince Patrick and northern Ellesmere islands south to coastal western Alaska (to Hooper Bay), northern Mackenzie, southern Keewatin, northeastern Manitoba (Churchill), Southampton and Belcher islands, northern Quebec and northern Labrador; and in the Palearctic in northern Greenland, and from northern Scandinavia, northern Russia, southern Novaya Zemlya and northern Siberia south to the British Isles (rarely), southern Scandinavia, the limits of tundra in Eurasia, and the Commander Islands.

Winters irregularly from the breeding range in North America south to southern Canada, North Dakota, Minnesota, northern Illinois, northern Michigan, and New York, casually or sporadically to central California (Monterey County), southern Nevada, Utah, Colorado, Oklahoma, central and southeastern Texas, the Gulf states and Georgia (sight reports from central Florida); and in Eurasia south to Iceland, the British Isles, northern continental Europe, central Russia, northern China and Sakhalin.

Casual or accidental in Bermuda, the Azores, Mediterranean region, Iran, northwestern India, and Japan.

Genus SURNIA Duméril

Surnia Duméril, 1806, Zool. Anal., p. 34. Type, by subsequent designation (G. R. Gray, 1840), Strix funerea Gmelin = Strix ulula Linnaeus.

Surnia ulula (Linnaeus). Northern Hawk Owl.

Strix Ulula Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 93. (in Europa = Sweden.)

Habitat.—Open coniferous or mixed coniferous-deciduous forest, forest edge and clearings, forest burns, dense tamarack, bogs, scrubby second-growth woodland and muskeg.

Distribution.—Breeds in North America from the limit of trees in western and central Alaska, central Yukon, northwestern and central Mackenzie, southern Keewatin, northern Manitoba, northern Ontario, northern Quebec, central Labrador and Newfoundland south to south-coastal Alaska (Kodiak Island), central British Columbia, northwestern Montana, west-central Alberta, central Saskatchewan, southern Manitoba, northern Minnesota, northern Wisconsin, southeastern Ontario, northern Michigan (once, Isle Royale, 1905), southern Quebec, and New Brunswick (breeding sporadic along southern limits of range); and in

Eurasia from northern Scandinavia, northern Russia and northern Siberia south to central Russia, northern Mongolia, northern Manchuria, and Sakhalin.

Winters from the breeding range southward, in North America irregularly to southern Canada and northern Minnesota, casually to Oregon, Idaho, Montana, Wyoming, Nebraska, Iowa, central Illinois, southern Michigan, northern Ohio and Pennsylvania; and in Eurasia to the British Isles, continental Europe and southern Russia.

Notes.—Known widely as the Hawk Owl.

Genus GLAUCIDIUM Boie

Glaucidium Boie, 1826, Isis von Oken, col. 970. Type, by subsequent designation (G. R. Gray, 1840), Strix passerina Linnaeus.

Glaucidium gnoma Wagler. Northern Pygmy-Owl.

Glaucidium Gnoma Wagler, 1832, Isis von Oken, col. 275. (Mexico.)

Habitat.—Open forest and woodlands, in coniferous, hardwood, mixed and pine-oak woodland (Subtropical and Temperate zones).

Distribution.—Resident [californicum group] from southern Alaska (recorded west to Yakutat), British Columbia (including Vancouver Island), west-central Alberta and western and central Montana south, mostly in mountainous regions, to southern California (Laguna Mountains), southern Arizona, and southern New Mexico (perhaps northern Mexico); [gnoma group] the interior of Mexico, Guatemala, and central Honduras; and [hoskinsii group] in the Cape district of southern Baja California.

Casual [californicum group] in northwestern Wyoming and western Texas.

Notes.—Heidrich et al. (1995b) considered G. californicum Sclater, 1857 [Northern Pygmy-Owl], and G. gnoma [Mexican Pygmy-Owl] to represent separate species based on genetic and vocal differences (as anticipated by Sibley and Monroe [1990] and Monroe and Sibley [1993]). König (1991) and Heidrich et al. (1995b) proposed, based on vocalizations, that the populations of Costa Rica and Panama traditionally assigned to G. jardinii belong with G. gnoma.

Glaucidium jardinii (Bonaparte). Andean Pygmy-Owl.

Phalænopsis jardinii Bonaparte, 1855, C. R. Acad. Sci. Paris 41: 654. (Andes of Quito, Ecuador.)

Habitat.—Montane Evergreen Forest (2000–3400 m; Subtropical and Temperate zones). Distribution.—Resident in the mountains of central Costa Rica and Panama (recorded Chiriquí and Veraguas); and in the Andes of South America from Colombia and western Venezuela south to northern Argentina.

Notes.—Also known as Mountain Pygmy-Owl. See comments under G. gnoma. König (1991) described the population from Peru to Argentina as a separate species, G. bolivianum [Yungas Pygmy-Owl], based on vocal differences.

Glaucidium griseiceps Sharp. Central American Pygmy-Owl.

Glaucidium griseiceps Sharp, 1875, Ibis 1875, p. 41. (Veragua [Panama] and Chisec and Choctum [Guatemala] = tropical lowlands [Coban] of Alta Vera Paz, Guatemala.)

Habitat.—Humid Evergreen Forest (0-1300 m; Tropical to lower Subtropical zones).

Distribution.—Resident on the Gulf-Caribbean slope of Middle America from southeastern Veracruz and northern Oaxaca south (not recorded Yucatan Peninsula or Nicaragua) to northwestern Colombia (also disjunct records on Pacific slope of Guatemala, in eastern Panama province, Canal area, and Darién, and north-northwest of Alto Tambo, Prov. Esmeraldas, Ecuador).

Notes.—Glaucidium griseiceps, G. sanchezi, G. palmarum and three South American forms (G. minutissimum [Wied, 1830], G. parkeri Robbins and Howell, 1995, and G. hardyi Vielliard, 1989) were formerly treated as conspecific, under G. minutissimum [Least Pygmy-Owl]. Howell and Robbins (1995) and Robbins and Howell (1995) summarized data on

vocalizations, morphology, coloration, and habitat distribution, which support the treatment of these six forms as species; see Vielliard (1989) and König (1991) for additional data on South American forms.

Glaucidium sanchezi Lowery and Newman. Tamaulipas Pygmy-Owl.

Glaucidium minutissimum sanchezi Lowery and Newman, 1949, Occas. Papers Louisiana State University Museum of Zoology 22:1-4. (Llano de Garzas, near Cerro Coneja, San Luis Potosí, Mexico.)

Habitat.—Humid Evergreen Forest (900–2100 m; lower Subtropical to upper Subtropical zones).

Distribution.—Resident on the Gulf-Caribbean slope of Mexico in southern Tamaulipas and eastern San Luis Potosí.

Notes.—See comments under G. griseiceps.

Glaucidium palmarum Nelson. Colima Pygmy-Owl.

Glaucidium palmarum Nelson, 1901, Auk 18:46. (Arroyo de Juan Sanchez, Territory of Tepic, Mexico.)

Habitat.—Tropical Deciduous Forest, Pine-Oak Forest (0–1500 m; lower Subtropical to upper Subtropical zones.)

Distribution.—Resident on the Pacific slope of Mexico from central Sonora to south-central Oaxaca (foothills inland of Puerto Angel) and in the Balsas drainage of southern Morelos and northern Guerrero.

Notes.—See comments under G. griseiceps.

Glaucidium brasilianum (Gmelin). Ferruginous Pygmy-Owl.

Strix brasiliana Gmelin, 1788, Syst. Nat. 1(1): 289. Based on "Le Hibou de Brésil" Brisson, Ornithologie, 1, p. 499. (in Brasilia = Ceará, Brazil.)

Habitat.—Arid Lowland Scrub, Arid Montane Scrub, Second-growth Scrub, Tropical Deciduous Forest, Tropical Lowland Evergreen Forest Edge, Secondary Forest, lowland pine savanna, giant cacti (0–2000 m; Tropical and lower Subtropical zones).

Distribution.—Resident from south-central Arizona (formerly north to Phoenix area), Sonora (at least formerly), Chihuahua, Coahuila, Nuevo León and southern Texas (north to Starr and Kenedy counties) south through Mexico (including Isla Cancun off Quintana Roo), Belize, Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica (Pacific slope, very rare on Caribbean drainage) and Panama (Pacific slope east to western Panamá province), and in South America from the coastal lowlands of Colombia, Venezuela (including Margarita Island), Trinidad and the Guianas south, east of the Andes to central Argentina.

Notes.—Also known as Ferruginous Owl. *Glaucidium nanum* (King, 1827) [Austral Pygmy-Owl] has been treated as conspecific (e.g., Marín et al. 1989) with *G. brasilianum*, but vocal differences support recognition as a species (König 1991); they constitute a superspecies (Mayr and Short 1970). König (1991) described the population of northwestern Peru as a separate species, *G. peruanum* [Peruvian Pygmy-Owl], based primarily on vocal differences; this treatment was followed by Monroe and Sibley (1993).

Glaucidium siju (d'Orbigny). Cuban Pygmy-Owl.

Noctua siju d'Orbigny, 1839, in La Sagra, Hist. Fis. Pol. Nat. Cuba, Ois., p. 41, pl. 3. (Cuba.)

Habitat.—Tropical Lowland Evergreen Forest, Tropical Deciduous Forest, Pine Forest, Secondary Forest (0-1500 m).

Distribution.—Resident on Cuba, Cayo Coco (Archipelago Sabana-Camagüey), and the Isle of Pines.

Genus MICRATHENE Coues

Micrathene Coues, 1866, Proc. Acad. Nat. Sci. Philadelphia 18: 51. Type, by original designation, Athene whitneyi Cooper.

Micropallas Coues, 1889, Auk 6: 71. New name for Micrathene Coues, thought to be preoccupied.

Micrathene whitneyi (Cooper). Elf Owl.

Athene whitneyi Cooper, 1861, Proc. Calif. Acad. Sci. (1)2: 118. (Fort Mojave, latitude 35° [N.], Colorado Valley [Arizona].)

Habitat.—Arid Lowland Scrub, Gallery Forest, Pine-Oak Forest (0–2100 m; Tropical and lower Subtropical zones).

Distribution.—Breeds from extreme southern Nevada (Colorado River, opposite Fort Mohave, Arizona, at least formerly), extreme southeastern California (lower Colorado River Valley, formerly west to central Riverside County), central Arizona, southwestern New Mexico, western and southern Texas, Coahuila and Nuevo León south to Sonora (including Isla Tiburón), Guanajuato and Puebla, probably elsewhere in central Mexico; also in southern Baja California (Cape district) and formerly in the Revillagigedo Islands (Socorro).

Winters from southern Sinaloa, Michoacán, Morelos and southern Texas south to Guerrero, Puebla and northwestern Oaxaca, certainly also elsewhere in central Mexico; resident on Socorro Island and in Baja California, where recorded north to lat. 28° 10′ N., possibly only as a vagrant.

Accidental in eastern New Mexico.

Genus ATHENE Boie

Athene Boie, 1822, Isis von Oken, col. 549. Type, by subsequent designation, (G. R. Gray, 1841), A. noctua (Retz.) Boie, Pl. enl. 439. Str. passerina Auct. = Strix noctua Scopoli.

Speotyto Gloger, 1841, Gemein. Handb.-und-Hilfsb., p. 226. Type, by monotypy, Strix cunicularia Molina.

Notes.—Although karyotypic and molecular studies suggest generic status for *Speotyto* (Schmutz et al. 1989. Sibley and Ahlquist 1990), we follow Amadon and Bull (1988) in merging *Speotyto* into *Athene*.

Athene cunicularia (Molina). Burrowing Owl.

Strix Cunicularia Molina, 1782, Saggio Stor. Nat. Chili, p. 263. (Chili = Chile.)

Habitat.—Northern Temperate Grassland, Arid Lowland Scrub, Arid Montane Scrub, tropical grasslands (0-4000 m; Tropical to Alpine zones).

Distribution.—Breeds from southern interior British Columbia, southern Alberta, central Saskatchewan (formerly) and southern Manitoba south through eastern Washington (formerly), central Oregon and California (including the Channel islands, formerly the Farallon Islands) to Baja California (including many coastal islands, and on Guadalupe Island), east locally to western Minnesota, northwestern Iowa, northwestern Missouri, Oklahoma and western Texas, and south to central Mexico (including Isla Clarión in the Revillagigedo group, but southern limits of the breeding range in the interior in Mexico not known); in Florida (north to Madison and Duval counties), the Bahamas, Cuba (western Pinar del Rio, northern Matanzas, southern Ciego de Avila, Cayo Coco, and near Guantánamo), Isle of Pines (Los Indios), Hispaniola (including Gonâve and Beata islands) and, at least formerly, the northern Lesser Antilles (St. Kitts, Nevis, Antigua, Redonda, and Marie Galante); and locally in South America from Colombia and Venezuela (including Margarita Island) south to northern Tierra del Fuego.

Winters in North America and Middle America in general through the breeding range, except for the northern portions in the Great Basin and Great Plains regions, and regularly south to southern Mexico, Guatemala and El Salvador (at least formerly), casually to Honduras (Monte Redondo), Costa Rica (Los Cuadros on Volcán Irazú) and Panama (Divalá in

Chiriquí); and through the breeding range in the West Indies and South America, casually to Cuba.

Casual north and east in eastern North America to Wisconsin, Michigan, western and southern Ontario, southern Quebec, Maine, New York, Massachusetts, Virginia and North Carolina, and in the Gulf states east to Alabama and northwestern Florida; a sight report for New Brunswick.

Genus CICCABA Wagler

Ciccaba Wagler, 1832, Isis von Oken, col. 1222. Type, by monotypy, Ciccaba huhula = Strix huhula Daudin.

Notes.—Ciccaba is often merged in Strix. If Ciccaba is recognized as a genus, it appears to be polyphyletic, according to morphological studies (Voous 1964, Norberg 1977) and genetic data (Sibley and Ahlquist 1990).

Ciccaba virgata (Cassin). Mottled Owl.

Syrnium virgatum Cassin, 1849, Proc. Acad. Nat. Sci. Philadelphia 4 (1848): 124. (South America = Bogotá, Colombia.)

Habitat.—Tropical Lowland Evergreen Forest, Montane Evergreen Forest, Tropical Deciduous Forest, Gallery Forest (0–2200 m; Tropical and Subtropical zones).

Distribution.—Resident from southern Sonora, southwestern Chihuahua, Sinaloa, Nayarit, Jalisco, Guanajuato, San Luis Potosí, central Nuevo León, and Tamaulipas south through Middle America (including the Yucatan Peninsula), and in South America from Colombia, Venezuela, Trinidad, and the Guianas south, west of the Andes to western Ecuador and east of the Andes to central Bolivia, Paraguay, and northeastern Argentina.

Accidental in southern Texas (Feb. 1983 in Hidalgo County; Lasley et al. 1988).

Notes.—Also known as Mottled Wood-Owl.

Ciccaba nigrolineata Sclater. Black-and-white Owl.

Ciccaba nigrolineata Sclater, 1859, Proc. Zool. Soc. London, p. 131. (In Mexico Meridionali = state of Oaxaca; Binford, 1989, Ornithol. Monogr. 43, p. 338.)

Habitat.—Tropical Lowland Evergreen Forest, Gallery Forest, Tropical Deciduous Forest, Montane Evergreen Forest (0–1500 m; Tropical and lower Subtropical zones).

Distribution.—Resident on both slopes of Middle America from southeastern San Luis Potosí, Veracruz, northern and southeastern Oaxaca, Chiapas, and Quintana Roo south locally to Panama, and in South America from Colombia east to northwestern Venezuela and south, west of the Andes, to western Ecuador and northwestern Peru.

Notes.—C. nigrolineata and the South American C. huhula Daudin, 1800, constitute a superspecies (Sibley and Monroe 1990).

Genus STRIX Linnaeus

Strix Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 92. Type, by tautonymy, Strix stridula Linnaeus (Strix, prebinomial specific name, in synonymy) = Strix aluco Linnaeus.

Notes.—See comments under Ciccaba.

Strix occidentalis (Xántus de Vesey). Spotted Owl.

Syrnium occidentale Xántus de Vesey, 1860, Proc. Acad. Nat. Sci. Philadelphia 11 (1859): 193. (Fort Tejon, California.)

Habitat.—Dense mature coniferous forest (primarily Douglas fir), especially in shaded, steep-walled canyons (Temperate Zone).

Distribution.—Resident [occidentalis group] in the mountains and in humid coastal forest from extreme southwestern British Columbia (north to Atka Lake, east to Manning Provincial Park) south through western Washington and western Oregon to south-central California

(Laguna Mountains) and, probably, northern Baja California (Sierra San Pedro Mártir); and [lucida group] in the Rocky Mountain region from southern Utah and central Colorado south through the mountains of Arizona, New Mexico, extreme western Texas (Guadalupe Mountains), northern Sonora, Chihuahua, Coahuila and Nuevo León to Jalisco, Michoacán and Guanajuato.

Notes.—The two groups, *S. occidentalis* [California Spotted-Owl] and *S. lucida* (Nelson, 1903) [Mexican Spotted-Owl], are genetically distinct to a degree reflecting long isolation (Barrowclough and Gutiérrez 1990). Several hybrids have occurred between *S. occidentalis* and *S. varia* (Hamer et al. 1994), which may form a superspecies (Mayr and Short 1970).

Strix varia Barton. Barred Owl.

Strix varius Barton, 1799, Fragm. Nat. Hist. Pa., p. 11. (Philadelphia, Pennsylvania.)

Habitat.—Dense woodland and forest (coniferous or hardwood), swamps, wooded river valleys, and cabbage palm-live oak hammocks, especially where bordering streams, marshes, and meadows (Subtropical and Temperate zones).

Distribution.—Resident from southeastern Alaska (from Skagway to Ketchikan), southern (including Vancouver Island) and eastern British Columbia south to northwestern California, Oregon and western Montana, east across central Alberta, and central Saskatchewan, and from southern Manitoba, central Ontario, southern Quebec, New Brunswick, Prince Edward Island and Nova Scotia, central and southern Texas, the Gulf coast and southern Florida, and west to eastern North Dakota, southeastern South Dakota (formerly), eastern Nebraska, central Kansas and western Oklahoma; and in the Central Plateau of Mexico from Durango south to Guerrero (Mount Teotepec) and Oaxaca (La Parada and Cerro San Felipe), and east to San Luis Potosí, Puebla, and Veracruz. Some Mexican populations are widely disjunct.

Northernmost populations are partially migratory, individuals occasionally ranging to the Gulf coast.

Accidental in Wyoming.

Notes.—S. varia and S. fulvescens are possibly conspecific, based on similar appearance and voice (Hardy et al. 1988). See comments under S. occidentalis.

Strix fulvescens (Sclater and Salvin). Fulvous Owl.

Syrnium fulvescens Sclater and Salvin, 1868, Proc. Zool. Soc. London, p. 58. (Guatemala.)

Habitat.—Montane Evergreen Forest, Pine-Oak Forest (1200–3100 m; Subtropical and lower Temperate zones).

Distribution.—Resident in the mountains of Chiapas, Guatemala, El Salvador, and Honduras; records from Oaxaca are erroneous.

Notes.—See comments under S. varia.

Strix nebulosa Forster. Great Gray Owl.

Strix nebulosa J. R. Forster, 1772, Philos. Trans. R. Soc. London 62: 424. (Severn River [northwestern Ontario].)

Habitat.—Dense coniferous and hardwood forest, especially pine, spruce, paper birch and poplar, with adjacent meadows, bogs, or clearings; in migration and winter also in second growth, especially near water, foraging in wet meadows.

Distribution.—*Breeds* in North America from central Alaska, northern Yukon, northwestern and central Mackenzie, northern Manitoba, northern Ontario and west-central Quebec south locally in the interior to the mountains of north-central Washington, south-central Oregon, California (southern Sierra Nevada), northern Idaho, western Montana, western Wyoming, southwestern and central Alberta, central Saskatchewan, southern Manitoba, northern Minnesota, northern Wisconsin, northern Michigan (casually) and south-central Ontario; and in Eurasia from northern Scandinavia, northern Russia and northern Siberia south to central Russia, northern Mongolia, northern Manchuria, Amurland and Sakhalin. Recorded in summer (and possibly breeding) in southern Quebec.

Winters generally through the breeding range, in central and eastern North America wandering south irregularly to northern Utah, southern Montana, North Dakota, southern Minnesota, southern Wisconsin, northern Michigan, southern Ontario and central New York, casually as far as coastal northern California, southern Idaho, Nebraska, Iowa, Indiana, Ohio, and from southern and eastern Quebec, New Brunswick, and Nova Scotia south to Pennsylvania and New Jersey.

Genus ASIO Brisson

Asio Brisson, 1760, Ornithologie 1: 28, 477. Type, by tautonymy, Asio Brisson = Strix otus Linnaeus.

Asio otus (Linnaeus). Long-eared Owl.

Strix Otus Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 92. (in Europa = Sweden.)

Habitat.—Riparian woodland and coniferous or mixed coniferous-deciduous forest, especially near water, usually with adjacent fields or meadows.

Distribution.—Breeds in North America from south-coastal and south-central British Columbia, southwestern Mackenzie, northern Saskatchewan, northern Manitoba, northern Ontario, southern Quebec, New Brunswick, Prince Edward Island and Nova Scotia south locally to northwestern Baja California (lat. 30° N.), southern Arizona (rarely), southern New Mexico, western (formerly central) Texas, Coahuila, central Oklahoma, Arkansas (formerly), Missouri, central Illinois, southern Indiana, central Ohio, Pennsylvania (also in the mountains to western Virginia), New York and New England (formerly to central Maryland); and in Eurasia from the British Isles, Scandinavia, northern Russia and northern Siberia south to the Azores, Canary Islands, northwestern Africa, southern Europe, Asia Minor, Iran, the Himalayas, Manchuria, Taiwan, and Korea.

Winters in North America from southern Canada south to northern Baja California (casually to Los Coronados, Cedros and Tiburón islands), Guerrero, Oaxaca, Puebla, San Luis Potosí, southern Texas, the Gulf coast and Georgia, casually to Florida, Bermuda and Cuba; and in the Old World from the breeding range south to northern Africa, Iraq, India, and southern China.

Casual or accidental in southeastern Alaska (Skagway, Taku River), Yukon (Dempster Highway) and Labrador (Red Bay).

Asio stygius (Wagler). Stygian Owl.

Nyctalops stygius Wagler, 1832, Isis von Oken, col. 1222. (Brazil or South Africa = Minas Gerais, Brazil.)

Habitat.—Montane Evergreen Forest, Pine-Oak Forest, Pine Forest, Tropical Lowland Evergreen Forest, Tropical Deciduous Forest (0–3100 m; Tropical to Temperate zones).

Distribution.—Resident locally in Middle America in northeastern Sinaloa, southwestern Chihuahua, northwestern Durango, Jalisco, Guerrero (Omilteme), Veracruz (Mirador), Chiapas (Volcán Tacaná), Guatemala (Cobán), Belize, and north-central Nicaragua; in the Greater Antilles (Cuba, the Isle of Pines, Hispaniola and Gonâve Island); and locally in South America in Colombia, western Venezuela, Ecuador, Brazil, Paraguay, and northern Argentina. Recorded also (and possibly resident) on Cozumel Island, Quintana Roo.

Asio flammeus (Pontoppidan). Short-eared Owl.

Strix flammea Pontoppidan, 1763, Dan. Atlas 1: 617, pl. 25. (Sweden.)

Habitat.—Open country, including prairie, meadows, tundra, moorlands, marshes, savanna, in the Hawaiian Islands also around towns; in winter, primarily in open country with tall grass.

Distribution.—*Breeds* in the Hawaiian Islands (main islands from Kauai eastward), and on Pohnpei in the Caroline Islands; in North America from northern Alaska, northern Yukon, northern Mackenzie, central Keewatin, southern Baffin Island (probably), northern Quebec, northern Labrador and Newfoundland south to the eastern Aleutian Islands (west to Unalaska),

southern Alaska, central (casually southern) California, northern Nevada, Utah, northeastern Colorado, Kansas, Missouri, southern Illinois, western Kentucky, southern Indiana, central Ohio, Pennsylvania, New Jersey and northern (formerly coastal) Virginia; in the Greater Antilles (Cuba, Cayo Coco, Hispaniola, Puerto Rico); in South America from Colombia, Venezuela and the Guianas south to Tierra del Fuego (including the Galapagos, Juan Fernández and Falkland islands); and in Eurasia from Iceland, the British Isles, Scandinavia, northern Russia and northern Siberia south to southern Europe, Afghanistan, Transbaicalia, northern Mongolia, northern Manchuria, Anadyrland, Sakhalin, the northern Kuril Islands and Kamchatka.

Winters generally in the breeding range, in the Hawaiian Islands ranging casually to the western islands (Kure, Midway, and casually east to French Frigate Shoals); in North America and Middle America mostly from southern Canada south to southern Baja California (casually to Los Coronados Islands and Isla Tiburón), Oaxaca, Puebla, Veracruz, the Gulf coast, southern Florida, and the Greater Antilles and Cayman Islands; and in the Old World south to northwestern Africa, the Mediterranean region, northeastern Africa, Asia Minor, Sri Lanka, the Malay Peninsula, southern China and Japan, casually to the Azores, eastern Atlantic islands, Borneo, the Philippines and Ryukyu Islands.

Casual or accidental in the Revillagigedo Islands (Clarión), Guatemala (Volcán de Agua), Bahamas (Grand Turk), the Virgin Islands (St. Thomas, Guana, possibly St. John), Lesser Antilles (St. Barthélemy), Bermuda, and Greenland.

Genus PSEUDOSCOPS Kaup

Pseudoscops Kaup, 1848, Isis von Oken, col. 769. Type, by monotypy, Ephialtes grammicus Gosse.

Rhinoptynx Kaup, 1851, Arch. Naturgesch. 17: 107. Type, by subsequent designation (Sharpe, 1875), Otus mexicanus Cuv. = Bubo clamator Vieillot.

Pseudoscops clamator (Vieillot). Striped Owl.

Bubo Clamator Vieillot, 1808, Hist. Nat. Ois. Amer. Sept. 1 (livr. 4): pl. 20. (depuis Caienne jusq'à la Baie d'Hudson = Cayenne.)

Habitat.—Low Seasonally Wet Grassland, Second-growth Scrub (0-1400 m; Tropical Zone).

Distribution.—Resident locally on the Gulf-Caribbean slope in northern Oaxaca, southern Veracruz, southern Belize, Guatemala, Honduras and Nicaragua, on the Pacific slope in El Salvador, on both slopes of Costa Rica and Panama, and in South America from eastern Colombia, Venezuela (also Tobago) and the Guianas south, west of the Andes to western Ecuador and east of the Andes (excluding much of Amazonia) to northern Argentina and Uruguay.

Notes.—Frequently placed either in *Asio* or in the monotypic genus *Rhinoptynx*, but see Olson (1995).

Pseudoscops grammicus (Gosse). Jamaican Owl.

Ephialtes grammicus Gosse, 1847, Birds Jamaica, p. 19 (footnote). (Bluefields Mountains and Tait-Shafton, Jamaica = Tait-Shafton.)

Habitat.—Tropical Lowland Evergreen Forest, Secondary Forest (0-600 m). Distribution.—Resident on Jamaica.

Genus AEGOLIUS Kaup

Aegolius Kaup, 1829, Skizz. Entw.-Ges. Eur. Thierw., p. 34. Type, by monotypy, Strix tengmalmi Gmelin = Strix funereus Linnaeus.

Aegolius funereus (Linnaeus). Boreal Owl.

Strix funereus Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 93. (in Europa = Sweden.)

Habitat.—Dense coniferous forest, mixed coniferous-hardwood forest, and thickets of alder, aspen or stunted spruce, muskeg, most commonly in proximity to open grassy situations.

Distribution.—*Breeds* in North America to tree line from central Alaska, central Yukon, southern Mackenzie, northern Saskatchewan, northern Manitoba, northern Ontario, central Quebec, Labrador and Newfoundland (probably) south to southern Alaska (Kodiak Island), northern and interior British Columbia, eastern Washington, northeastern Oregon, central Idaho, western Montana, northwestern and southern Wyoming, western Colorado, northern New Mexico, central Saskatchewan, southern Manitoba, northern Minnesota, western and central Ontario, southern Quebec (Magdalen Islands) and New Brunswick (Grand Manan); and in Eurasia from northern Scandinavia, northern Russia and northern Siberia south to the mountains of southern Europe, the western Himalayas, western China, Sakhalin and Kamchatka.

Winters generally in the breeding range, in North America south irregularly (or casually) to southern British Columbia, central Montana, North Dakota, eastern South Dakota, southern Minnesota, central Wisconsin, southern Michigan, southern Ontario, New York and New England, casually to southern Oregon, Nebraska, northern Illinois, Pennsylvania, and New Jersey; and in Eurasia to southern Europe, Ussuriland, the Kuril Islands, and Japan.

Accidental in the Pribilofs (St. Paul).

Notes.—Known in Old World literature as Tengmalm's Owl.

Aegolius acadicus (Gmelin). Northern Saw-whet Owl.

Strix acadica Gmelin, 1788, Syst. Nat. 1(1): 296. Based on the "Acadian Owl" Latham, Gen. Synop. Birds 1(1): 149, pl. 5, fig. 2. (in America septentrionali = Nova Scotia.)

Habitat.—Dense coniferous or mixed coniferous-hardwood forest, cedar groves, alder thickets and tamarack bogs; in migration and winter, also in dense second growth, brushy areas, arid scrub and open buildings.

Distribution.—Breeds from southern Alaska (west to the base of the Alaska Peninsula), southern and northeastern British Columbia (including the Queen Charlotte Islands), central Alberta, central Saskatchewan, central Manitoba, central Ontario, southern Quebec (possibly also Anticosti Island), northern New Brunswick, Prince Edward Island and Nova Scotia south to the mountains of south-central California (also on Santa Cruz and Santa Catalina islands) and presumably northern Baja California (sight reports, Sierra San Pedro Martír), locally in the highlands of Mexico from Tamaulipas and Coahuila to Oaxaca (Cerro San Felipe), and to extreme western Texas, central Oklahoma, central Missouri (formerly), central Illinois, central Indiana, central Ohio, West Virginia, Virginia, western Maryland, and New York (Long Island); also in the mountains and adjacent lowlands of eastern Tennessee and western North Carolina.

Winters generally throughout the breeding range, south irregularly or casually to desert regions of southern California and southern Arizona, to the Gulf coast (eastern Texas eastward), and through the Atlantic states to northeastern (possibly southern) Florida.

Casual or accidental on islands in the Bering Sea (St. Lawrence Island, and St. Paul in the Pribilofs), Newfoundland and Bermuda.

Notes.—A. acadicus and A. ridgwayi are closely related and may be conspecific [Sawwhet Owl]; they constitute a superspecies (Binford 1989, Hardy et al. 1989).

Aegolius ridgwayi (Alfaro). Unspotted Saw-whet Owl.

Cryptoglaux ridgwayi Alfaro, 1905, Proc. Biol. Soc. Wash. 18: 217. (Cerro de la Candelaria, near Escasú, Costa Rica.)

Habitat.—Montane Evergreen Forest, Pine-Oak Forest (2300-3300 m; Subtropical and lower Temperate zones).

Distribution.—Resident locally in Chiapas, Guatemala (Sacapulas, Quetzaltenango and Soloma), El Salvador (Los Esesmiles, at least formerly), Costa Rica (Volcán Irazú, and Candelaria and Dota mountains) and western Panama (Volcán Barú, in western Chiriquí).

Notes.—See comments under A. acadicus.

Order CAPRIMULGIFORMES: Goatsuckers, Oilbirds, and Allies

Family CAPRIMULGIDAE: Goatsuckers

Subfamily CHORDEILINAE: Nighthawks

Genus LUROCALIS Cassin

Lurocalis Cassin, 1851, Proc. Acad. Nat. Sci. Philadelphia 5: 189. Type, by subsequent designation (G. R. Gray, 1855), Caprimulgus nattereri Temminck = Caprimulgus semitorquatus Gmelin.

Lurocalis semitorquatus (Gmelin). Short-tailed Nighthawk.

Caprimulgus semitorquatus Gmelin, 1789, Syst. Nat. 1(2): 1031. Based on the "White-collared Goatsucker" Latham, Gen. Synop. Birds 2(2): 599. (in Cayenna = Cayenne.)

Habitat.—Tropical Lowland Evergreen Forest, River-edge Forest (0-1700 m; Tropical and lower Subtropical zones).

Distribution.—Resident [semitorquatus group] from eastern Chiapas, Guatemala, northern Honduras and northeastern Nicaragua (Río Banbana) south through Costa Rica (entire Caribbean slope, and Pacific southwest) and Panama (both slopes, including Isla Cébaco), and in South America in northern Colombia, Venezuela (except western), Trinidad, the Guianas and extreme northwestern Brazil; and [nattereri group] in the lowlands of South America from eastern Ecuador and Amazonian and eastern Brazil south to northern Bolivia and northern Argentina.

Notes.—Also known as Semicollared Nighthawk. Groups: L. semitorquatus [Short-tailed Nighthawk] and L. nattereri (Temminck, 1822) [Chestnut-banded Nighthawk]. The two groups were treated by Hardy et al. (1989) as separate species based on vocalizations, but no comprehensive analysis of vocalizations has been published. Lurocalis rufiventris Taczanowski [Rufous-bellied Nighthawk] of the Andes of South America, is now usually regarded as a species distinct from L. semitorquatus (Parker et al. 1991, Monroe and Sibley 1993) based on strong differences in vocalizations and plumage (e.g., see Fjeldså and Krabbe 1990).

Genus CHORDEILES Swainson

Chordeiles [subgenus] Swainson, 1832, in Swainson and Richardson, Fauna Bor.-Amer. 2 (1831): 337, 496. Type, by original designation, Caprimulgus virginianus Gmelin = Caprimulgus minor Forster.

Chordeiles acutipennis (Hermann). Lesser Nighthawk.

Caprimulgus acutipennis Hermann, 1783, Tabula Affinit. Anim., p. 230. Based mainly on "Crapaud-volant ou Tette-chevre de la Guiane" Daubenton, Planches Enlum., pl. 732. (Cayenne.)

Habitat.—Open country, desert regions, scrub, savanna and cultivated areas, primarily in arid habitats (Tropical to lower Temperate zones).

Distribution.—Breeds from central interior California, southern Nevada, extreme southwestern Utah, central Arizona, central New Mexico and south-central Texas south to southern Baja California, and through the lowlands of both slopes of Mexico (including the Yucatan Peninsula and Cozumel Island) to Guatemala, also locally in Honduras (arid interior valleys on Caribbean drainage), Nicaragua (Tipitapa), Costa Rica (Pacific slope of Guanacaste, and Puerto Cortés area) and Panama (Coclé and western Panamá province); and in South America from Colombia, Venezuela (including Margarita Island), Tobago, Trinidad and the Guianas south locally to Paraguay and southern Brazil.

Winters from southern California (casually), Baja California, southwestern Arizona (casually), central Sinaloa, Durango and Veracruz south through Middle America and South America to the limits of the breeding range; also casually to Chile.

Migrates regularly through Middle America (including the Bay Islands off Honduras),

most commonly on the Pacific slope. In North America, ranges casually east along the Gulf coast to Alabama.

Casual or accidental in Alaska (specimen from Noatak River mouth), Colorado, northeastern New Mexico, Oklahoma (Boise City), Ontario (Point Pelee), Florida (Pensacola area and Dry Tortugas), and Bermuda.

Notes.—Also known as Trilling Nighthawk.

Chordeiles minor (Forster). Common Nighthawk.

Caprimulgus minor J. R. Forster, 1771, Cat. Anim. N. Amer., p. 13. Based on "The Whip-poor Will" Catesby, Nat. Hist. Carolina 2 (app.): 16. (No locality given = South Carolina.)

Habitat.—A wide variety of open and semi-open situations, especially in savanna, grasslands, fields, and around human habitation, including cities and towns; frequently nests on flat gravel roofs of buildings (Tropical to Temperate zones).

Distribution.—Breeds from southern Yukon, southern Mackenzie, northern Saskatchewan, northern Manitoba, northern Ontario, central Quebec, southern Labrador and Nova Scotia south to southern California (San Bernardino Mountains), southern Nevada, southern Arizona, northeastern Sonora, Chihuahua, Texas, Tamaulipas, the Gulf coast and southern Florida, and south locally through the Gulf and Caribbean slopes of Mexico (excluding the Yucatan Peninsula) to Chiapas, in the pine savanna of Belize and the Mosquitia of eastern Honduras and Nicaragua, and in Costa Rica and Panama (east to eastern Panamá province).

Winters in South America south to northern Argentina.

Migrates through Middle America and the West Indies, including most islands in the Caribbean Sea and those off Venezuela, and (in fall) in southeastern Alaska.

Casual or accidental in the Hawaiian Islands (French Frigate Shoals); north to south-coastal, central and northern Alaska, northern Yukon, Melville Island, coastal Labrador, Newfoundland and Greenland; Clipperton Island, Bermuda, and Europe; and at sea near the Azores.

Notes.—Also known as Booming Nighthawk. Chordeiles minor and C. gundlachii are often treated as conspecific, despite differences in vocalizations (but see McAtee 1947, Eisenmann 1962a, Stevenson et al. 1983, Hardy et al. 1988); they probably constitute a superspecies (Sibley and Monroe 1990).

Chordeiles gundlachii Lawrence. Antillean Nighthawk.

Chordeiles gundlachii Lawrence, 1857, Ann. Lyc. Nat. Hist. N. Y. 6: 165. (Cuba.)

Habitat.—Second-growth Scrub, Arid Lowland Scrub (0-600 m).

Distribution.—Breeds in the Florida Keys, the Bahamas, Greater Antilles (east to the Virgin Islands, including small cays off Cuba, Gonâve and Tortue) and Cayman Islands; also on the southern Florida mainland (identified by call).

Winters presumably in South America.

Casual in summer in Louisiana (New Orleans) and in migration in the Swan Islands (western Caribbean Sea).

Notes.—See comments under C. minor.

Subfamily CAPRIMULGINAE: Nightjars

Genus NYCTIDROMUS Gould

Nyctidromus Gould, 1838, Icones Avium, pt. 2, pl. [12] and text. Type, by monotypy, Nyctidromus derbyanus Gould = Caprimulgus albicollis Gmelin.

Nyctidromus albicollis (Gmelin). Common Pauraque.

Caprimulgus albicollis Gmelin, 1789, Syst. Nat. 1(2): 1030. Based on the "White-throated Goatsucker" Latham, Gen. Synop. Birds 2(2): 596. (in Cayenna = Cayenne.)

Habitat.—Tropical Lowland Evergreen Forest Edge, Secondary Forest, Gallery Forest, Tropical Deciduous Forest, lowland pine savanna (0–1700 m; Tropical and Subtropical zones).

Distribution.—Resident from southern Sonora, Sinaloa, southern Texas (McMullen and Refugio counties, casually north to Zavala, Frio and De Witt counties), Nuevo León and Tamaulipas south along both slopes of Middle America (including the Tres Marias, Mujeres and Cozumel islands off Mexico, and the Pearl Islands off Panama), and in South America from Colombia, Venezuela, Trinidad and the Guianas south, west of the Andes to northwestern Peru and east of the Andes to northern Argentina and southern Brazil.

Notes.—Also known as the Pauraque.

Genus PHALAENOPTILUS Ridgway

Phalænoptilus Ridgway, 1880, Proc. U. S. Natl. Mus. 3: 5. Type, by original designation, Caprimulgus nuttallii Audubon.

Phalaenoptilus nuttallii (Audubon). Common Poorwill.

Caprimulgus Nuttallii Audubon, 1844, Birds Amer. (octavo ed.) 7: 350, pl. 495. (upper Missouri = between Fort Pierre and mouth of the Cheyenne River, South Dakota.)

Habitat.—Rocky and gravelly terrain in sparse scrubland, broken chaparral, and openings in woodland and forest.

Distribution.—Breeds from southern interior British Columbia, Montana, extreme southwestern Saskatchewan, central North Dakota, southwestern (and formerly also southeastern) South Dakota and Nebraska south through eastern Washington, central and eastern Oregon and California to southern Baja California, southern Sonora, Durango, Jalisco, Guanajuato and Coahuila, and east to eastern Kansas, western Oklahoma and central Texas.

Winters in southern parts of the breeding range in California and Arizona (probably also farther east), sometimes in a torpid condition, and south to the limits of the breeding range in Mexico.

Casual or accidental in southwestern British Columbia, southern Manitoba (Treesbank), northwestern Ontario (near Moosonee), Minnesota (Swift County), and eastern Oklahoma (Tulsa).

Genus SIPHONORHIS Sclater

Siphonorhis Sclater, 1861, Proc. Zool. Soc. London, p. 77. Type, by original designation, Caprimulgus americanus Linnaeus.

†Siphonorhis americanus (Linnaeus). Jamaican Pauraque.

Caprimulgus americanus Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 193. Based on the "Small wood owl" Sloane, Voy. Jamaica 2: 296, pl. 255, fig. 1. (in America calidiore = Jamaica.)

Habitat.—Tropical Deciduous Forest, Arid Lowland Scrub.

Distribution.—EXTINCT. Formerly *resident* on Jamaica; last collected near Spanishtown in September 1859 (specimen USNM).

Notes.—S. americanus and S. brewsteri are closely related and constitute a superspecies (Sibley and Monroe 1990). Called Jamaican Poorwill by Sibley and Monroe (1990).

Siphonorhis brewsteri (Chapman). Least Pauraque.

Microsiphonorhis brewsteri Chapman, 1917, Bull. Amer. Mus. Nat. Hist. 37: 329. (Túbano, Province of Azua, Dominican Republic.)

Habitat.—Tropical Deciduous Forest, Arid Lowland Scrub (0–900 m).

Distribution.—Resident locally on Hispaniola (including Gonâve Island).

Notes.—See comments under *S. americanus*. Called Least Poorwill by Sibley and Monroe (1990).

Genus NYCTIPHRYNUS Bonaparte

Nyctiphrynus Bonaparte, 1857, Riv. Contemp. 9: 215. Type, by subsequent designation (Oberholser, 1914), Caprimulgus ocellatus Tschudi.

Otophanes Brewster, 1888, Auk 5: 88. Type, by original designation, Otophanes mcleodii Brewster.

Nyctagreus Nelson, 1901, Proc. Biol. Soc. Wash. 14: 171. Type, by original designation, Caprimulgus yucatanicus Hartert.

Nyctiphrynus mcleodii (Brewster). Eared Poorwill.

Otophanes mcleodii Brewster, 1888, Auk 5: 89. (Sierra Madre of Chihuahua, Mexico.)

Habitat.—Pine-Oak Forest, Tropical Deciduous Forest (1100–1800 m; upper Tropical and lower Subtropical zones).

Distribution.—Resident locally in Chihuahua (including near the Sonora-Chihuahua border), eastern Sinaloa, Jalisco, Colima, Guerrero and Oaxaca (Sierra de Miahuatlán).

Notes.—This and the following two species are often placed in the genus *Otophanes* (Friedmann et al. 1950).

Nyctiphrynus yucatanicus (Hartert). Yucatan Poorwill.

Caprimulgus yucatanicus Hartert, 1892, Cat. Birds Brit. Mus. 16: xv, 525, 575. (Tizimin, Yucatan.)

Habitat.—Tropical Deciduous Forest, Arid Lowland Scrub (Tropical Zone).

Distribution.—Resident in the Yucatan Peninsula, northern Guatemala (Petén) and Belize. **Notes**.—See comments under N. mcleodii.

Nyctiphrynus ocellatus (Tschudi). Ocellated Poorwill.

Caprimulgus ocellatus Tschudi, 1844, Arch. Naturgesch. 10: 268. (Republica Peruana = Peru.)

Habitat.—Tropical Lowland Evergreen Forest, Secondary Forest, lowland pine savanna (0–1350 m; Tropical Zone).

Distribution.—Resident (presumably) in northern Nicaragua (single specimen from Peña Blanca, Jinotega); northern Costa Rica (Brasilia), and in South America east of the Andes from southeastern Colombia, eastern Ecuador, and Amazonian Brazil south to Paraguay and northeastern Argentina. A sight report for Panama (Canal area) requires confirmation.

Notes.—See comments under N. mcleodii.

Genus CAPRIMULGUS Linnaeus

Caprimulgus Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 193. Type, by tautonymy, Caprimulgus europaeus Linnaeus (Caprimulgus, prebinomial specific name, in synonymy). Antrostomus Bonaparte, 1838, Geogr. Comp. List, p. 8. Type, by subsequent designation (G. R. Gray, 1840), Caprimulgus carolinensis Gmelin.

Antiurus Ridgway, 1912, Proc. Biol. Soc. Wash. 25: 98. Type, by original designation, Stenopsis maculicaudus Lawrence.

Setochalcis Oberholser, 1914, Bull. U. S. Natl. Mus., no. 86, p. 11. Type, by original designation, Caprimulgus vociferus Wilson.

Caprimulgus carolinensis Gmelin. Chuck-will's-widow.

Caprimulgus carolinensis Gmelin, 1789, Syst. Nat. 1(2): 1028. Based mainly on "The Goat Sucker of Carolina" Catesby, Nat. Hist. Carolina 1: 8, pl. 8. (in Virginia et Carolina = South Carolina.)

Habitat.—Deciduous forest, pine-oak association and live-oak groves; in migration and winter also in open woodland, scrub, and Tropical Evergreen Forest.

Distribution.—*Breeds* from eastern Kansas, southern and eastern Iowa, central Illinois, northwestern and central Indiana, extreme southern Ontario, southern Ohio, central West Virginia, Maryland, New Jersey and southern New York (Long Island) and (probably) Massachusetts (Martha's Vineyard) south to eastern Oklahoma, south-central and southeastern Texas, the Gulf coast and southern Florida. Recorded sporadically in summer north to southeastern South Dakota, southern Minnesota, Wisconsin, southern Michigan and Pennsylvania.

Winters from southeastern Texas (rare), southern Louisiana (rare), and coastal Alabama (rare) south through Middle America (reported on the Gulf-Caribbean slope of Mexico and Belize and on both slopes south of Mexico) to Colombia, and from central Florida and the Bahamas south through the Greater Antilles to the northern Lesser Antilles (Saba, St. Martin, Barbuda).

Casual or accidental in California, Nevada, eastern New Mexico, southern Quebec, northern New York, Maine, New Brunswick, Nova Scotia, Newfoundland, the Cayman Islands and Netherlands Antilles (Bonaire), and Venezuela.

Notes.—C. carolinensis and C. rufus constitute a superspecies (Mayr and Short 1970).

Caprimulgus rufus Boddaert. Rufous Nightjar.

Caprimulgus rufus Boddaert, 1783, Table Planches Enlum., p. 46. Based on "Crapaud-Volant ou Tette-Chèvre de Cayenne" Daubenton, Planches Enlum., pl. 735. (Cayenne.)

Habitat.—Tropical Deciduous Forest, Secondary Forest, Gallery Forest (0–1800 m; Tropical and lower Subtropical zones).

Distribution.—Resident [minimus group] in southeastern Costa Rica, Panama (primarily the Pacific slope, including Isla Coiba), northern Colombia, western and northern Venezuela and Trinidad; [rufus group] in South America from Colombia, southern Venezuela and the Guianas south, east of the Andes to northern Argentina, Paraguay and southern Brazil; and [otiosus group] in the Lesser Antilles (St. Lucia); erroneously reported from northern Venezuela.

Notes.—Groups: C. minimus Griscom and Greenway, 1937 [Ruddy Nightjar], C. rufus [Rufous Nightjar], and C. otiosus (Bangs, 1911) [St. Lucia Nightjar]. We follow Robbins and Parker (1997a) in treating C. otiosus as a subspecies of C. rufus. See comments under C. carolinensis.

Caprimulgus cubanensis (Lawrence). Greater Antillean Nightjar.

Antrostomus Cubanensis Lawrence, 1860, Ann. Lyc. Nat. Hist. N. Y. 7: 260. (Cienaga de Zapata, and on the coast of Manzanillo, Cuba.)

Habitat.—Tropical Lowland Evergreen Forest, Pine Forest (0-2000 m).

Distribution.—Resident [cubanensis group] in Cuba and the Isle of Pines; and [ekmani group] in Hispaniola.

Notes.—Differences in vocalizations (Hardy et al. 1988) suggest that the two groups may represent separate species, *C. cubanensis* [Cuban Nightjar] and *C. ekmani* (Lönnberg, 1929) [Hispaniolan Nightjar].

Caprimulgus salvini Hartert. Tawny-collared Nightjar.

Caprimulgus salvini Hartert, 1892, Ibis, p. 287. New name for Antrostomus macromystax Baird, Brewer and Ridgway, preoccupied.

Habitat.—Tropical Deciduous Forest (Tropical Zone).

Distribution.—Breeds from Nuevo León and southern Tamaulipas south through eastern San Luis Potosí and Veracruz to northern Oaxaca (winter only) and Chiapas (probably resident throughout most of this range north of Oaxaca).

Recorded from Nicaragua (Matagalpa); probably represents a vagrant.

Notes.—Without explanation, Peters (1940) considered C. salvini to be conspecific with C. sericocaudatus (Cassin, 1849) [Silky-tailed Nightjar]. See notes under C. badius.

Caprimulgus badius (Bangs and Peck). Yucatan Nightjar.

Antrostomus badius Bangs and Peck, 1908, Proc. Biol. Soc. Washington, 21, p. 44. (Toledo District, British Honduras = Belize.)

Habitat.—Tropical Deciduous Forest (Tropical Zone).

Distribution.—Breeds in the Yucatan Peninsula (including Cozumel Island).

Recorded in winter in Belize (including Half Moon Cay) and northern Honduras.

Notes.—Formerly considered conspecific with *C. salvini* and with the South American *C. sericocaudatus* (Cassin, 1849) [Silky-tailed Nightjar]. The three taxa are apparently closely related but have distinctive vocalizations (Hardy and Straneck 1989).

Caprimulgus ridgwayi (Nelson). Buff-collared Nightjar.

Antrostomus ridgwayi Nelson, 1897, Auk 14: 50. (Tlalkisala, Guerrero, Mexico.)

Habitat.—Tropical Deciduous Forest, Arid Montane Scrub, Arid Lowland Scrub, Pine-Oak Forest (0–2000 m; Tropical and Subtropical zones).

Distribution.—Resident from southern Arizona, southern Sonora, Sinaloa and Durango south through western Mexico and the southern portions of the Central Plateau to Morelos, Oaxaca and Chiapas; disjunctly on the Caribbean slope in central Veracruz; and in the Motagua Valley of Guatemala, the interior of Honduras, and central Nicaragua. Casual in summer elsewhere in southeastern Arizona and extreme southwestern New Mexico (Guadalupe Canyon). Northernmost populations are migratory southward.

A specimen record from California (Ventura Co.) is under review.

Notes.—Also known as Ridgway's Whip-poor-will.

Caprimulgus vociferus Wilson. Whip-poor-will.

Caprimulgus vociferus Wilson, 1812, Amer. Ornithol. 5: 71, pl. 41, figs. 1-3. (Pennsylvania = Philadelphia.)

Habitat.—Forest and open woodland, both arid and humid, from lowland moist and deciduous forest to montane forest and pine-oak association, breeding in the tropics primarily in open montane forest (Tropical to Temperate zones).

Distribution.—Breeds [arizonae group] in southern California (probably, in San Gabriel, San Bernardino, San Jacinto and Clark mountains), and from southern Nevada, northern Arizona, central New Mexico and extreme western Texas south through the highlands of Mexico, Guatemala and El Salvador to Honduras, also (probably) in southern Baja California; and [vociferus group] from south-central Saskatchewan, southern Manitoba, central Ontario, southern Quebec, central New Brunswick and Nova Scotia south, east of the Great Plains (west to eastern North Dakota, southeastern South Dakota, eastern Nebraska, eastern Kansas and Oklahoma) to extreme northeastern Texas, Arkansas, northern Mississippi, north-central Alabama, central Georgia, South Carolina, east-central North Carolina and Virginia.

Winters [arizonae group] in central Mexico; and [vociferus group] from northern Mexico (Sonora eastward), southern Texas, the Gulf coast and east-central South Carolina (casually farther north, on the Atlantic coast to New Jersey) south through Middle America to Costa Rica, casually to southern California, western Panama (western Chiriquí) and Cuba.

Casual [arizonae group] in central northern California, southern Alberta, southwestern Saskatchewan, northwestern Montana (calls only) and central Colorado; and [vociferus group] in eastern Colorado (probably) and central eastern Quebec. Accidental [vociferus group] in southeastern Alaska (Kupreanof Island).

Notes.—The two groups differ in egg pigmentation (Phillips et al. 1964) and in vocalizations (Hardy et al. 1988) and may represent separate species, *C. arizonae* (Brewster, 1881) [Western Whip-poor-will] and *C. vociferus* [Eastern Whip-poor-will]. *Caprimulgus vociferus* and *C. noctitherus* constitute a superspecies (Mayr and Short 1970).

Caprimulgus noctitherus (Wetmore). Puerto Rican Nightjar.

Setochalcis noctitherus Wetmore, 1919, Proc. Biol. Soc. Wash. 32: 235. (Bayamón, Puerto Rico.)

Habitat.—Tropical Deciduous Forest.

Distribution.—Resident on Puerto Rico, where now restricted to the southwestern portion of the island.

Notes.—Also known as Puerto Rican Whip-poor-will. Reynard (1962) documented vocal differences between this form and *C. vociferus* that support their treatment as separate species. See also comments under *C. vociferus*.

Caprimulgus saturatus (Salvin). Dusky Nightjar.

Antrostomus saturatus Salvin, 1870, Proc. Zool. Soc. London, p. 203. (Volcán de Chiriquí, Panama.)

Habitat.—Montane Evergreen Forest (1500–3100 m; Subtropical and Temperate zones). **Distribution.**—Resident in the central highlands of Costa Rica, and in western Panama (vicinity of Volcán Barú, western Chiriquí).

Caprimulgus cayennensis Gmelin. White-tailed Nightjar.

Caprimulgus cayennensis Gmelin, 1789, Syst. Nat. 1(2): 1031. Based mainly on "Engoulevent de Cayenne" Buffon, Hist. Nat. Ois. 6: 545, and the "White-necked Goatsucker" Latham, Gen. Synop. Birds 2(2): 599. (in Cayennae cultis = Cayenne.)

Habitat.—Low Seasonally Wet Grassland, Second-growth Scrub (0–1000 m; Tropical and Subtropical zones).

Distribution.—Resident in the Lesser Antilles (Martinique, where possibly extirpated); and in Costa Rica and Panama, and in South America from northern Colombia, Venezuela (including islands from the Netherlands Antilles to Tobago and Trinidad) and the Guianas south locally to northern Ecuador and northern Brazil.

Accidental in Puerto Rico (sight report).

Notes.—*C. cayennensis* and *C. candicans* appear to constitute a superspecies (Sibley and Monroe 1990).

Caprimulgus maculicaudus (Lawrence). Spot-tailed Nightjar.

Stenopsis maculicaudus Lawrence, 1862, Ann. Lyc. Nat. Hist. N. Y. 7: 459. (Para [Brazil].)

Habitat.—Low Seasonally Wet Grassland, lowland pine savanna (0-1500 m; Tropical Zone).

Distribution.—Breeds locally in the Gulf-Caribbean lowlands of southern Mexico (southern Veracruz, northern Oaxaca), in the Mosquitia of northeastern Nicaragua (probably also eastern Honduras), and in South America from eastern Colombia, Venezuela and the Guianas south locally, east of the Andes, to central Bolivia and southeastern Brazil.

Apparently at least partly migratory from the Middle American breeding grounds, as there are few records during the nonbreeding season; recorded also from central Honduras (Lake Yojoa), probably as a transient. Presumably resident in the South American portion of the breeding range.

Caprimulgus indicus Latham. Jungle Nightjar.

Caprimulgus indicus Latham, 1790, Index Ornithol. 2: 588. Based on the "Indian Goatsucker" Latham, Gen. Synop. Birds (suppl.) 1: 196. (in India.)

Habitat & Distribution.—Breeds in open woodland and forest from Manchuria and Japan south to India, Sri Lanka and eastern China, and winters in a variety of woodland and partly open habitats from the Himalayas, eastern China and Japan south to the East Indies and New Guinea.

Casual in the Kuril Islands and Sakhalin. Accidental in Alaska (Buldir Island in the Aleutians, 31 May 1977; Day et al. 1979).

Notes.—Also known as Gray Nightjar.

Family **NYCTIBIIDAE**: Potoos

Genus NYCTIBIUS Vieillot

Nyctibius Vieillot, 1816, Analyse, p. 38. Type, by monotypy, "Grand Engoulevent de Cayenne" Buffon = Caprimulgus grandis Gmelin.

Nyctibius grandis (Gmelin). Great Potoo.

Caprimulgus grandis Gmelin, 1789, Syst. Nat. 1(2): 1029. Based mainly on "Le grand Tette-chévre tacheté du Brésil" Brisson, Ornithologie, 2, 485, and the "Grand Goatsucker" Latham, Gen. Synop. Birds, 2 (2), 590. (in Cayenna = Cayenne.)

Habitat.—Tropical Lowland Evergreen Forest, Gallery Forest (Tropical Zone).

Distribution.—Resident locally in eastern Chiapas, Guatemala (Polochic and Salinas rivers), eastern Honduras (Olancho), Nicaragua (San Emilio), Costa Rica and Panama (Caribbean lowlands throughout, and Pacific lowlands in eastern Panamá province and Darién), and in South America from Colombia, Venezuela and the Guianas south, east of the Andes, to central Bolivia and southeastern Brazil.

Nyctibius griseus (Gmelin). Common Potoo.

Caprimulgus griseus Gmelin, 1789, Syst. Nat. 1(2): p. 1029. (in Cayenna = Cayenne.)

Habitat.—Tropical Lowland Evergreen Forest Edge, Secondary Forest, Gallery Forest, Montane Evergreen Forest Edge, River-edge Forest, lowland pine savanna (0–1800 m; Tropical and lower Subtropical zones).

Distribution.—Resident from southwestern Costa Rica and eastern Nicaragua (recorded also in northwestern Nicaragua) south to Panama, and in South America from Colombia, Venezuela, (also Trinidad and Tobago) and the Guianas south, west of the Andes to western Ecuador and east of the Andes to Bolivia, northern Argentina and Uruguay.

Notes.—Despite a lack of abrupt morphological change, dramatic differences in vocalizations indicate that specific status is warranted for this species and *N. jamaicensis*. (Davis 1978, Hardy et al. 1988, Stiles and Skutch 1989).

Nyctibius jamaicensis (Gmelin). Northern Potoo.

Caprimulgus jamaicensis Gmelin, 1789, Syst. Nat. 1(2): p. 1029. (Jamaica.)

Habitat.—Open woodland, sometimes near human settlement (Subtropical and Tropical zones)

Distribution.—Resident from southern Sinaloa, southern San Luis Potosí and southern Tamaulipas south along both slopes of Middle America to Caribbean slope of eastern Honduras (including Isla Roatán in the Bay Islands) and Pacific slope of Central Costa Rica, and in the Greater Antilles (Jamaica, Hispaniola and Gonâve Island).

Notes.—Formerly treated as conspecific with *N. griseus*; see note under that species. They constitute a superspecies.

Family **STEATORNITHIDAE**: Oilbirds

Genus STEATORNIS Humboldt

Steatornis Humboldt, 1814, in Humboldt and Bonpland, Voy. Inter. Amer. 1: 416. Type, by monotypy, "Guacharo" = Steatornis caripensis Humboldt.

Steatornis caripensis Humboldt. Oilbird.

Steatornis caripensis Humboldt, 1817, Bull. Sci. Soc. Philom. Paris, p. 52. (caverns of Caripe, Cumaná, Venezuela.)

Habitat.—Tropical Lowland Evergreen Forest, Montane Evergreen Forest; nests and roosts in caves; forages at night for fruits in open woodland (0-2200 m).

Distribution.—Resident in Colombia, Venezuela, Trinidad and the Guianas, and in the Andes locally south to central Bolivia.

Casual (although probably resident) in Panama (Canal area, eastern Panamá province, eastern Darién). Accidental in Costa Rica (Cerro de la Muerte).

Order APODIFORMES: Swifts and Hummingbirds

Family APODIDAE: Swifts

Subfamily CYPSELOIDINAE: Cypseloidine Swifts

Genus CYPSELOIDES Streubel

Cypseloides Streubel, 1848, Isis von Oken, col. 366. Type, by subsequent designation (Sclater, 1865), Hemiprocne fumigata Streubel.

Cypseloides niger (Gmelin). Black Swift.

Hirundo nigra Gmelin, 1789, Syst. Nat. 1(2): 1025. Based on "Le Martinet de S. Domingue" Brisson, Ornithologie 2: 514, pl. 46, fig. 3. (in insulae S. Dominici et Cayennae = Hispaniola.)

Habitat.—Primarily montane areas (except in the most northern part of the range), foraging over both forest and open areas; nests in crevices or shallow caves in steep rock faces and canyons, usually near or behind waterfalls (occasionally in sea caves) (Subtropical and Temperate zones).

Distribution.—Breeds locally from southeastern Alaska (north to the Stikine River), south-central British Columbia, and southwestern Alberta south through the Pacific states to southern California, and from Idaho, northwestern Montana, western and central Colorado, central Utah, southeastern Arizona, north-central New Mexico, Chihuahua, Durango, Nayarit, Hidalgo, and Veracruz south through southern Mexico, Guatemala, and Honduras to Costa Rica (not recorded Nicaragua); and in the Antilles (Cuba, Jamaica, Hispaniola, Puerto Rico, Montserrat, Guadeloupe, Dominica, Martinique, St. Lucia, and St. Vincent).

Migrates through western North America through California, Arizona, New Mexico, and Mexico (including Baja California, with records at sea in the Pacific off Chiapas and Guatemala) to Costa Rica and northwestern Colombia, and through the Lesser Antilles to Trinidad and Guyana.

Winters (presumably) in South America, but distribution unknown (Stiles and Negret 1994).

Migrates in western North America through California, Arizona, New Mexico, and Mexico (including Baja California, with records at sea in the Pacific off Chiapas and Guatemala), and to the Virgin Islands and Lesser Antilles.

Casual in south-coastal Alaska (Wooded Islands); sight report for Panama (Chiriquí). Sight reports for Florida and Texas are questionable.

Notes.—Formerly placed in the monotypic genus *Nephoecetes* Baird, 1858. Mayr and Short (1970) considered *C. niger* and South American *C. lemosi* Eisenmann and Lehmann, 1962, and *C. fumigatus* (Streubel, 1848) to constitute a superspecies.

Cypseloides storeri Navarro et al. White-fronted Swift.

Cypseloides storeri Navarro et al., 1992, Wilson Bull. 104: 56. (Puerto del Gallo, Tlacotepec, Guerrero, Mexico.)

Habitat.—Montane Evergreen Forest; generally near waterfalls (1500-2500 m; Subtropical Zone).

Distribution.—Known from five specimens from the mountains of Jalisco (Autlán), Michoacán (Tacámbaro), and Guerrero (Sierra de Atoyac).

Notes—Howell and Webb (1995) treated storeri as a subspecies of C. cryptus.

Cypseloides cryptus Zimmer. White-chinned Swift.

Cypseloides cryptus Zimmer, 1945, Auk 62: 588. (Inca Mine, Río Tavara, Perú.)

Habitat.—Montane Evergreen Forest, Tropical Lowland Evergreen Forest, Tropical Lowland Evergreen Forest Edge (0–3000 m; Tropical and Subtropical zones).

Distribution.—*Breeds* in western and central Costa Rica (Cordillera de Guanacaste, Tres Ríos, Rara Avis), and presumably in South America (recorded Colombia, Venezuela, Guyana, Ecuador, and Peru); recorded locally from the Caribbean slope of Belize, Honduras (San Esteban), Nicaragua (El Recreo), and Panama (San Blas and Isla Coiba).

Notes—See comments under *C. storeri*.

Cypseloides cherriei Ridgway. Spot-fronted Swift.

Cypseloides cherriei Ridgway, 1893, Proc. U. S. Natl. Mus. 16: 44. (Volcán de Irazú, Costa Rica.)

Habitat.—Montane Evergreen Forest; nests on rock ledges near waterfalls (900-1100 m; Subtropical Zone).

Distribution.—Known only from Costa Rica (Volcán de Irazú, and Puntarenas province), Colombia (Santander), Venezuela (Aragua, where nesting has been verified), and northwestern Ecuador.

Genus STREPTOPROCNE Oberholser

Streptoprocne Oberholser, 1906, Proc. Biol. Soc. Wash. 19: 69. Type, by original designation, *Hirundo zonaris* Shaw.

Semicollum [subgenus] Brooke, 1970, Durban Mus. Novit. 9: 16. Type, by original designation, Acanthylis semicollaris de Saussure.

Streptoprocne rutila (Vieillot). Chestnut-collared Swift.

Hirundo rutila Vieillot, 1817, Nouv. Dict. Hist. Nat. (nouv. éd.) 14: 528. (No locality given = Trinidad.)

Habitat.—Montane Evergreen Forest, Secondary Forest, Second-growth Scrub; nests on rock faces near or behind waterfalls (occasionally in sea caves) (800–2800 m; Tropical and Subtropical zones).

Distribution.—Resident from eastern Sinaloa, Durango, Zacatecas, Hidalgo, and Veracruz south through Middle America (not reported Nicaragua), and in South America from Colombia, Venezuela, Trinidad, Guyana, and French Guiana (probably) south in the Andes to central Bolivia. Possibly migratory in part, especially the northern Middle American populations. A sight report for southwestern Chihuahua.

Notes.—Formerly placed in the genus *Chaetura* or *Cypseloides*, but see Marín and Stiles (1992), who showed that *rutila* and its close allies share numerous characters with *Streptoprocne*, especially in reproductive and nesting traits.

Streptoprocne zonaris (Shaw). White-collared Swift.

Hirundo zonaris Shaw, 1796, in J. F. Miller, Cimelia Phys., p. 100, pl. 55. (No locality given = Chapada, Mato Grosso, Brazil.)

Habitat.—Montane Evergreen Forest, Tropical Lowland Evergreen Forest, Secondary Forest, Second-growth Scrub, Pine Forest; nests on cliffs near or behind waterfalls (0-3600 m; Tropical to Temperate zones).

Distribution.—Resident from Guerrero, San Luis Potosí, and Tamaulipas south through Middle America (including Isla Coiba off Panama), and in South America from Colombia, Venezuela, Trinidad, and the Guianas south to northwestern Argentina, and central and southeastern Brazil; and in the Greater Antilles (Cuba, Jamaica, Hispaniola, Tortue Island, and possibly also the Isle of Pines).

Wanders irregularly north in the Lesser Antilles to Grenada and the Grenadines. Accidental in Texas (Freeport Rockport, Padre Island), northwestern Florida (Perdido Key), and the northern Lesser Antilles (Saba); sight reports from northwestern California, Michigan (Iosco Co.), Sinaloa, Colima, Jalisco, Vieques Island (off Puerto Rico), and St. Kitts.

Notes.—In the West Indies, also known as Antillean Cloud Swift.

Streptoprocne semicollaris (Saussure). White-naped Swift.

Acanthylis semicollaris Saussure, 1859, Rev. Mag. Zool. (2)11: 118. (les grandes forêts, du Mexique = San Joaquin, near City of Mexico.)

Habitat.—Pine-Oak Forest, Tropical Deciduous Forest, Second-growth Scrub; nests on ledges in caves (800–3400 m; Tropical to lower Temperate zones).

Distribution.—Resident in northern and central Mexico (recorded Sinaloa, Chihuahua, Durango, Nayarit, México, Distrito Federal, Morelos, and Guerrero).

Accidental in Chiapas.

Subfamily CHAETURINAE: Chaeturine Swifts

Genus CHAETURA Stephens

Chætura Stephens, 1826, in Shaw, Gen. Zool. 13(2): 76. Type, by subsequent designation (Swainson, 1829), Chaetura pelasgia [sic] = Hirundo pelagica Linnaeus.

Chaetura pelagica (Linnaeus). Chimney Swift.

Hirundo pelagica Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 192. Based on "The American Swallow" Catesby, Nat. Hist. Carolina 2 (app.): 8, pl. 8. (in America = South Carolina.)

Habitat.—Open situations and woodland, especially around human habitation; now nests and roosts primarily in chimneys, originally on cliffs or in hollow trees.

Distribution.—Breeds in eastern North America east of the Rocky Mountains from east-central Saskatchewan, southern Manitoba, central Ontario, southern Quebec, New Brunswick, Prince Edward Island, Nova Scotia, and Newfoundland (probably) south to eastern New Mexico (probably), south-central and southern Texas, the Gulf coast, and southern Florida, and west to southeastern Wyoming and eastern Colorado, with one confirmed breeding record for southern California (Ventura, 1977); recorded in summer (and probably breeding) elsewhere in central and southern California, and in Arizona.

Winters in western Peru, northern Chile, and in the upper Amazon basin of eastern Peru and northwestern Brazil.

Migrates regularly through the lowlands of eastern Mexico, the Caribbean slope of Middle America (including Cozumel Island, the Bay Islands off Honduras, and Taboga Island off Panama, casually on the Pacific slope of eastern Panama), Colombia, and western Venezuela, casually west to Montana, Utah, California (primarily southern portion), Arizona, and New Mexico, and through the Bahamas, Greater Antilles (recorded Cuba, Jamaica, Hispaniola, Tortue Island, and the Virgin Islands), and the Swan and Cayman islands.

Casual or accidental in Alaska (St. George Island in the Pribilofs), Bermuda, Greenland, and the British Isles; sight reports from Alberta are questionable.

Notes.—Chaetura pelagica, C. vauxi, and C. chapmani may constitute a superspecies (Mayr and Short 1970).

Chaetura vauxi (Townsend). Vaux's Swift.

Cypcelus [sic] Vauxi J. K. Townsend, 1839, Narr. Journey Rocky Mount., etc., p. 348. (Columbia River = Fort Vancouver, Washington.)

Habitat.—Breeds primarily in mature coniferous and mixed forest, foraging and migrating also over open country; Tropical Lowland Evergreen Forest, Montane Evergreen Forest, Tropical Deciduous Forest, Secondary Forest, Second-growth Scrub (Tropical to Temperate zones).

Distribution.—Breeds [vauxi group] in western North America from southeastern Alaska (north to Haines and Skagway), southern British Columbia, northern Idaho, and western Montana south to central California (Santa Cruz County, probably Monterey County), and in southwestern Tamaulipas, southeastern San Luis Potosí, and Hidalgo. Recorded in summer (and probably breeding) [group uncertain] through much of central and southeastern Mexico.

Winters [vauxi group] from central Mexico (rarely from northern California) south throughout the breeding range in Middle America, and in Venezuela,

Migrates [vauxi group] east of the breeding range from Idaho, Nevada, and Utah (rarely) south through the southwestern United States, Baja California, and western Mexico.

Resident [richmondi group] from Jalisco, Veracruz, and Chiapas south to Panama (including Coiba and the Pearl islands) and northern Venezuela (Lara to Monagas); and [gaumeri group] on the Yucatan Peninsula (including Cozumel Island).

Casual [vauxi group] in southern Louisiana and western Florida (sight reports).

Notes.—The three groups have often been treated as separate species, *C. vauxi* [Vaux's Swift], *C. richmondi* Ridgway, 1910 [Dusky-backed Swift], and *C. gaumeri* Lawrence, 1882 [Yucatan Swift]. See comments under *C. pelagica*.

Chaetura chapmani Hellmayr. Chapman's Swift.

Chætura chapmani Hellmayr, 1907, Bull. Br. Ornithol. Club 19: 62. (Caparo, Trinidad.)

Habitat.—Tropical Lowland Evergreen Forest, Secondary Forest, Second-growth Scrub (0–1500 m; Tropical to lower Temperate zones)

Distribution.—Resident from eastern Colombia, Venezuela, Trinidad, and the Guianas south locally to southwestern and northeastern Brazil, the southernmost population migratory northward.

Ranges casually to (and possibly resident in) central Panama (Gatun, Canal area, 11 July 1911, and Mandinga, San Blas, 30 January 1957).

Notes.—Also known as Dark-breasted Swift. See comments under C. pelagica.

Chaetura brachyura (Jardine). Short-tailed Swift.

Acanthylis brachyura Jardine, 1846, Ann. Mag. Nat. Hist. (1) 18: 120. (Tobago.)

Habitat.—Secondary Forest, Tropical Lowland Evergreen Forest Edge, Tropical Deciduous Forest, Second-growth Scrub (0–1050 m; Tropical Zone).

Distribution.—Resident in the Lesser Antilles (St. Vincent, the population apparently partly migratory), and from Panama (eastern Colón, Canal area, and Darién), Colombia, Venezuela, Tobago, Trinidad, and the Guianas south, east of the Andes to northern Bolivia and central Brazil; also west of the Andes in southwestern Ecuador and northwestern Peru.

Accidental in the Virgin Islands (St. Croix). Reports from Grenada are regarded as doubtful.

Chaetura andrei Berlepsch and Hartert. Ashy-tailed Swift.

Chaetura andrei Berlepsch and Hartert, 1902, Novit. Zool. 9: 91. (Caicara, Orinoco River, Venezuela.)

Habitat.—Tropical Lowland Evergreen Forest Edge, Secondary Forest, Second-growth Scrub (0–1600 m).

Distribution.—Breeds in Venezuela, and from eastern Brazil south to Paraguay, northern Argentina, and southern Brazil, ranging in winter from the breeding range north, at least casually, to Venezuela and Colombia.

Accidental in Panama (Juan Díaz, western Panamá province, 4 August 1923; Rogers 1939). **Notes.**—Also known as Andre's Swift. Although the nominate form may be a subspecies of *C. vauxi*, the subspecies *C. a. meridionalis*, the form recorded in Panama, may be a separate species, *C. meridionalis* Hellmayr, 1907 [Sick's Swift] (Marín 1997).

Chaetura spinicauda (Temminck). Band-rumped Swift.

Cypselus spinicaudus Temminck, 1839, Planches Color., livr. 102, Tabl. Méth., p. 57. Based on "Hirondelle à queue pointue de Cayenne" Daubenton, Planches Enlum., pl. 726, fig. 1. (Cayenne.)

Habitat.—Tropical Lowland Evergreen Forest Edge, Secondary Forest (0–1000 m; Tropical and lower Subtropical zones).

Distribution.—Resident in southwestern Costa Rica (El General, Térraba, and Golfo Dulce regions) and Panama, and in South America from Colombia, Venezuela, Trinidad, and the Guianas south, west of the Andes to western Ecuador, and east of the Andes to Amazonian Brazil.

Chaetura cinereiventris Sclater. Gray-rumped Swift.

Chætura cinereiventris Sclater, 1862, Cat. Collect. Amer. Birds, p. 283. (Bahia, Brazil.)

Habitat.—Tropical Lowland Evergreen Forest, Montane Evergreen Forest, River-edge Forest, Secondary Forest (0–1800 m; Tropical and Subtropical zones).

Distribution.—Resident [sclateri group] in the Lesser Antilles (Grenada), from the Caribbean slope of Nicaragua and Costa Rica south to western Panama (western Bocas del Toro), and in South America from Colombia, Venezuela, Trinidad, and the Guianas south, at least locally, west of the Andes to western Ecuador, and east of the Andes to northern Bolivia and Amazonian Brazil; and [cinereiventris group] in northeastern Argentina and southeastern Brazil.

Notes.—Groups: C. sclateri Pelzeln, 1916 [Ash-rumped Swift] and C. cinereiventris [Gray-rumped Swift]. Chaetura cinereiventris and C. martinica constitute a superspecies (Sibley and Monroe 1990).

Chaetura martinica (Hermann). Lesser Antillean Swift.

Hirundo martinica Hermann, 1783, Tabula Affinit. Anim., p. 229. (Martinique, West Indies.)

Habitat.—Tropical Lowland Evergreen Forest, Secondary Forest (0-1000 m).

Distribution.—Resident in the Lesser Antilles (Guadeloupe, Dominica, Martinique, St. Lucia, and St. Vincent); doubtfully recorded from Nevis (sight report). Reports from Trinidad are erroneous, being based on specimens actually taken on Dominica.

Notes.—See comments under C. cinereiventris.

Genus HIRUNDAPUS Hodgson

Hirund-apus Hodgson, 1837, J. Asiat. Soc. Bengal 5 (1836): 780. Type, by original designation, Cypselus (Chaetura) nudipes Hodgson.

Hirundapus caudacutus (Latham). White-throated Needletail.

Hirundo caudacuta Latham, 1802, Index Ornithol., suppl. (1801), p. 57. (Nova Hollandia = New South Wales, Australia.)

Habitat.—Montane forest; nests in hollow trees; in migration and winter in forested and open regions.

Distribution.—Breeds in the Himalayas and from Siberia south to Mongolia, Manchuria, Korea, and Japan, and winters from India and Taiwan south to Australia and Tasmania.

Casual in the western Aleutians (Attu, Shemya), Europe, the Shetland Islands, and New Zealand.

Notes.—Also known as White-throated Needle-tailed Swift.

Genus AERODRAMUS Oberholser

Aerodramus Oberholser, 1906, Proc. Acad. Nat. Sci. Philadelphia 58: 179, 182. Type, by original designation, Collocalia innominata Hume = Hirundo fuciphaga Thunberg.

Notes.—We follow Lee et al. (1996) in maintaining the genus *Aerodramus*; see also Browning (1993).

Aerodramus bartschi (Mearns). Guam Swiftlet.

Collocalia bartschi Mearns, 1909, Proc. U. S. Nat. Mus., 36, p. 476. (Guam.)

Habitat.—Steep valleys on tropical islands; nests in caves or behind waterfalls.

Distribution.—Resident on the island of Guam, at least formerly, and in the northern Mariana Islands (Saipan, Tinian, Agiguan, formerly Rota). Introduced (in 1962) and established in Hawaii (Halava Valley, Oahu, breeding in 1989).

Notes.—Formerly (A.O.U. 1983) treated as part of the species A. vanikorensis, but Browning (1993) has shown that the species in the A.O.U. area is distinct, and has presented evidence that the species is established where introduced in Hawaii.

Subfamily APODINAE: Apodine Swifts

Genus APUS Scopoli

Apus Scopoli, 1777, Introd. Hist. Nat., p. 483. Type, by tautonymy, Hirundo apus Linnaeus.

Tachymarptis Roberts, 1922, Ann. Transvaal Mus., 8, p. 216. Type, by original designation, *Hirundo melba* Linnaeus.

Apus apus (Linnaeus). Common Swift.

Hirundo Apus Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 192. (in Europæ altis = Sweden.)

Habitat.—Nests in tree cavities and in cliffs.

Distribution.—Breeds from northern Eurasia south to northern Africa, Arabia, Iraq, the Himalayas, and northeastern China, and winters in the southern half of Africa.

Accidental in Alaska (St. Paul Island, in the Pribilofs, 28 June 1950; Kenyon and Phillips 1965); a sight report from Barbados is questionable.

Notes.—Known in Old World literature as the Swift.

Apus pacificus (Latham). Fork-tailed Swift.

Hirundo pacifica Latham, 1802, Index Ornithol., suppl., (1801) p. lviii. (Nova Hollandia = New South Wales, Australia.)

Habitat.—A wide variety of habitats from seacoasts to mountains, generally nesting in colonies on cliffs, and in caves, buildings or tree cavities.

Distribution.—Breeds from eastern Siberia and Kamchatka south to northern India, the Malay Peninsula, and southern China.

Winters from the Himalayas and Malay Peninsula south to New Guinea, Australia, and New Zealand.

Ranges casually (primarily in summer and fall) to the Pribilof (St. George, St. Paul) and western Aleutian (Attu, Agattu, Shemya) islands; a sight report from Middleton Island in the Gulf of Alaska.

Accidental in the Seychelles and Marshall Islands.

Notes.—Also known as White-rumped Swift, a name now generally restricted to the African species A. caffer (Lichtenstein, 1823).

Apus melba (Linnaeus). Alpine Swift.

Hirundo Melba Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 192. (ad fretum Herculeam = Gibraltar.)

Habitat.—Nests on cliffs and buildings.

Distribution.—Breeds from southern Europe and India south to southern Africa, Madagascar, and Sri Lanka, and winters generally throughout the breeding range, the northernmost populations being partly migratory.

Accidental in the Lesser Antilles (Barbados, September 1955, after a hurricane; Bond 1959: 11) and Puerto Rico (9 July 1987, photograph; 1987, Amer. Birds 41: 1492); a sight report for St. Lucia.

Notes.—Sometimes placed in the genus *Tachymarptis* (Sibley and Monroe 1990).

Genus AERONAUTES Hartert

Aëronautes Hartert, 1892, Cat. Birds Br. Mus. 16: xiii, 436, 459. Type, by monotypy, Cypselus melanoleucus Baird = Acanthylis saxatalis Woodhouse.

Aeronautes saxatalis (Woodhouse). White-throated Swift.

Acanthylis saxatalis Woodhouse, 1853, in Sitgreaves, Rep. Exped. Zuni Colo. Rivers, p. 64. (Inscription Rock, New Mexico.)

Habitat.—Primarily mountainous country, especially near cliffs and canyons, foraging over forest and open situations; nests in cliffs, occasionally in buildings and on seacliffs (Subtropical and Temperate zones).

Distribution.—Breeds from extreme south-central British Columbia, Idaho, Montana, and southwestern South Dakota south through the Pacific and southwestern states (including the Channel Islands off California) to southern Baja California (a questionable sight record of nesting on Guadalupe Island in 1892, unreported there since 1922), east to western Nebraska, northeastern and central New Mexico, and western Texas (to Val Verde County), and south through the interior of Mexico to Guatemala, El Salvador, and Honduras.

Winters from central California, central Arizona, and, rarely, southern New Mexico (casually farther north) south to the limits of the breeding range in Middle America.

Casual in Kansas and eastern and southern Texas. Accidental in coastal British Columbia, Missouri (Cape Giraudeau), Arkansas (Hot Springs), and Michigan; sight reports for North Dakota and the Dominican Republic.

Genus PANYPTILA Cabanis

Panyptila Cabanis, 1847, Arch. Naturgesch. 13: 345. Type, by original designation, Hirundo cayennensis Gmelin.

Panyptila cayennensis (Gmelin). Lesser Swallow-tailed Swift.

Hirundo cayennensis Gmelin, 1789, Syst. Nat. 1(2): 1024. Based on "Le Martinet à collier blanc" Buffon, Hist. Nat. Ois. 6: 671, and "Martinet à collier de Cayenne" Daubenton, Planches Enlum., pl. 725, fig. 2. (in Cayenna = Cayenne.)

Habitat.—Tropical Lowland Evergreen Forest, Secondary Forest (0-1200 m; Tropical Zone).

Distribution.—Resident from southern Veracruz, northern Oaxaca, and Chiapas (both slopes) south locally on the Caribbean slope of Belize, Guatemala (also Pacific slope), Honduras, and Nicaragua, in Costa Rica (Caribbean slope, and Golfo Dulce region on the Pacific), and Panama (both slopes), and in South America from Colombia, Venezuela, Tobago, Trinidad, and the Guianas south, west of the Andes to northwestern Peru, and east of the Andes to northern Bolivia and east-central Brazil.

Notes.—Also known as Cayenne Swift.

Panyptila sanctihieronymi Salvin. Great Swallow-tailed Swift.

Panyptila sancti-hieronymi Salvin, 1863, Proc. Zool. Soc. London, p. 190, pl. 23. (San Geronimo, [Baja] Verapaz, Guatemala.)

Habitat.—Montane Evergreen Forest, Pine Forest, Secondary Forest, Arid Montane Scrub (900–1850 m; Subtropical and Temperate zones).

Distribution.—Resident in the highlands and Pacific slope of Nayarit, Jalisco, Colima, Michoacán, México, Guerrero, Oaxaca, Chiapas, Guatemala, and Honduras.

Casual in north-central Nicaragua (El Corozo, Nueva Segovia); sight reports for Costa Rica.

Notes.—Also known as Geronimo Swift.

Genus TACHORNIS Gosse

Tachornis Gosse, 1847, Birds Jamaica, p. 58 (footnote). Type, by monotypy, Tachornis phoenicobia Gosse.

Tachornis phoenicobia Gosse. Antillean Palm-Swift.

Tachornis phænicobia Gosse, 1847, Birds Jamaica, p. 58 (footnote). (Jamaica.)

Habitat.—Low Seasonally Wet Grassland, Second-growth Scrub; nests in colonies in palm trees.

Distribution.—Resident on Cuba, the Isle of Pines, Hispaniola (including Saona and Beata islands, and île-à-Vache), and Jamaica.

Accidental in the Florida Keys (Key West), July-August 1972 (Robertson and Woolfenden 1992); a sight report for Puerto Rico.

Family TROCHILIDAE: Hummingbirds

Notes.—For recognition of subfamilies, see Bleiweiss et al. (1994).

Subfamily PHAETHORNITHINAE: Hermits

Genus GLAUCIS Boie

Glaucis Boie, 1831, Isis von Oken, col. 545. Type, by subsequent designation (G. R. Gray, 1840), G. braziliensis (Lath.) = Trochilus hirsutus Gmelin.

Notes.—Gill and Gerwin (1989), based on allozyme data, recommended the merger of *Threnetes* into *Glaucis*.

Glaucis aenea Lawrence. Bronzy Hermit.

Glaucis æneus Lawrence, 1868, Proc. Acad. Nat. Sci. Philadelphia 19 (1867): 232. (Costa Rica.)

Habitat.—Tropical Lowland Evergreen Forest, Secondary Forest (0-800 m; Tropical Zone).

Distribution.—Resident from the Caribbean slope of Nicaragua south through Costa Rica (both slopes) to western Panama (Bocas del Toro, Chiriquí, western Veraguas); and the Pacific lowlands of Colombia and northwestern Ecuador.

Notes.—Glaucis aenea and G. hirsuta are closely related and constitute a superspecies (Sibley and Monroe 1990).

Glaucis hirsuta (Gmelin). Rufous-breasted Hermit.

Trochilus hirsutus Gmelin, 1788, Syst. Nat. 1(1): 490. Based in part on "Le Colibry du Brésil" Brisson, Ornithologie 3: 670. (in Brasilia = northeastern Brazil.)

Habitat.—Tropical Lowland Evergreen Forest, Secondary Forest, River-edge Forest (0–1100 m; Tropical Zone).

Distribution.—Resident from central and eastern Panama (from Coclé and western Panamá province eastward), eastern Colombia, Venezuela, Trinidad, Tobago, and the Guianas south, east of the Andes, to central Bolivia and central Brazil; and in the Lesser Antilles on Grenada.

Notes.—See comments under G. aenea.

Genus THRENETES Gould

Threnetes Gould, 1852, Monogr. Trochil., pt. 4, pl. [14 and 15]. Type, by subsequent designation (G. R. Gray, 1855), Trochilus leucurus Linnaeus.

Notes.—See note under Glaucis.

Threnetes ruckeri (Bourcier). Band-tailed Barbthroat.

Trochilus Ruckeri Bourcier, 1847, Proc. Zool. Soc. London, p. 46. (No locality given = Esmeraldas, Ecuador.)

Habitat.—Tropical Lowland Evergreen Forest, Secondary Forest (0-1050 m; Tropical Zone)

Distribution.—Resident on the Caribbean slope of southern Belize, eastern Guatemala, Honduras, and Nicaragua, and in Costa Rica (both slopes, except dry northwest), Panama, Colombia, western Venezuela, and western Ecuador.

Notes.—Threnetes ruckeri and the South American T. leucurus (Linnaeus, 1766) constitute a superspecies.

Genus PHAETHORNIS Swainson

Phæthornis Swainson, 1827, Philos. Mag.(n.s.) 1: 441. Type, by original designation, "Troch. superciliosus of Authors" = Trochilus superciliosus Linnaeus.

Pygmornis Bonaparte, 1854, Rev. Mag. Zool. (2)6: 250. Type, by monotypy, Trochilus intermedius Lesson = Trochilus longuemareus Lesson.

Phaethornis guy (Lesson). Green Hermit.

Trochilus Guy Lesson, 1833, Les Trochil., p. 119, Index, p. xiv. (Brazil, error = Venezuela.)

Habitat.—Montane Evergreen Forest (800–2000 m, locally to 350 m; upper Tropical and Subtropical zones).

Distribution.—Resident in the mountains of Costa Rica, Panama, and South America from Colombia, northern Venezuela, and Trinidad south on western slope of the Andes to western Colombia and on eastern slope to southern Peru.

Phaethornis superciliosus (Linnaeus). Long-tailed Hermit.

Trochilus superciliosus Linnaeus, 1766, Syst. Nat. (ed. 12) 1: 189. Based on "Le Colibry a longue queue de Cayenne" Brisson, Ornithologie 3: 686, pl. 35, fig. 5. (in Cayania = Cayenne.)

Habitat.—Tropical Lowland Evergreen Forest, Montane Evergreen Forest, Tropical Deciduous Forest (0–1400 m; Tropical and lower Subtropical zones).

Distribution.—Resident [griseoventer group] in western Mexico from west-central Nayarit (near Tepic and San Blas) south to Jalisco (Sierra de Autlán, Mineral San Sebastian) and Colima (Cerro Grande); [mexicanus group] in Guerrero and western Oaxaca; [longirostris group] on the Gulf-Caribbean slope from Veracruz, Tabasco, northern Oaxaca, and Chiapas (Arroyo de la Playas, Palenque) south through Central America to Nicaragua, on both slopes of Costa Rica and Panama, and in northern Colombia and northwestern Venezuela; [baroni group] in South America west of the Andes in western Ecuador and northwestern Peru; and [superciliosus group] in South America east of the Andes from northern Colombia and southern Venezuela south to central Bolivia and Amazonian Brazil.

Notes.—Groups: *P. griseoventer* Phillips, 1962 [Jalisco Hermit], *P. mexicanus* Hartert, 1897 [Hartert's Hermit], *P. longirostris* DeLattre, 1843 [Long-tailed Hermit], *P. baroni* Hartert, 1897 [Baron's Hermit], and *P. superciliosus* [Rusty-breasted Hermit]. At least the three northern groups should probably be treated as species; Howell and Webb (1995) treated *griseoventer* and *mexicanus* together as a species under the latter name. Hinckelmann (1996) recognized all Central American populations as *P. longirostris*, distinct from *superciliosus* and *baroni*.

Phaethornis anthophilus (Bourcier). Pale-bellied Hermit.

Trochilus anthophilus Bourcier, 1843, Rev. Zool. [Paris] 6: 71. (la vallée supérieure de la Madeleine, région tempérée, la Colombie = upper Magdalena Valley, Colombia.)

Habitat.—Tropical Lowland Evergreen Forest, Secondary Forest (0–900 m; Tropical and lower Subtropical zones).

Distribution.—Resident from eastern Panama (eastern San Blas, eastern Panamá province) east through northern Colombia to northern Venezuela.

Phaethornis longuemareus (Lesson). Little Hermit.

Trochilus Longuemareus Lesson, 1832, Les Trochil., p. 15; 1833, p. 160, pl. 2, 62. (Cayenne.)

Habitat.—Tropical Lowland Evergreen Forest, Secondary Forest (0-1200 m; Tropical and lower Subtropical zones).

Distribution.—Resident [adolphi group] on the Gulf-Caribbean slope of Middle America from Veracruz, northern Oaxaca, Tabasco, Chiapas, Campeche, and Quintana Roo south through Belize and eastern Guatemala to Honduras, on both slopes in Nicaragua (rare on Pacific slope), Costa Rica (rare in dry northwest), and Panama, and in western Colombia and western Ecuador; and [longuemareus group] in South America from northern Colombia, Venezuela, and Trinidad south, east of the Andes, to central Peru and Amazonian Brazil.

Notes.—The groups perhaps should be recognized as distinct species, *P. adolphi* Gould, 1857 [Boucard's Hermit] and *P. longuemareus* [Little Hermit]. These forms belong to a well defined group of small species (Gill and Gerwin 1989) that may be recognizable at the generic level as *Pygmornis* Bonaparte, 1854 (as treated by Howell and Webb 1995).

Genus EUTOXERES Reichenbach

Eutoxeres Reichenbach, 1849, Avium Syst. Nat., pl. XL [generic description only]; species added, Gould, 1851, Monogr. Trochil., pt. 2, pl. [5 and 6]. Type, by subsequent designation (G. R. Gray, 1855), Trochilus aquila "Lodd." = Bourcier.

Eutoxeres aquila (Bourcier). White-tipped Sicklebill.

Trochilus Aquila (Loddiges MS) Bourcier, 1847, Proc. Zool. Soc. London, p. 42. (Nouvelle Grenade, les environs de Bogota = vicinity of Bogotá, Colombia.)

Habitat.—Humid Montane, Tropical Lowland Evergreen Forest (0–2100 m; upper Tropical and lower Subtropical zones).

Distribution.—Resident from central Costa Rica south locally through Panama, and in South America on western slope of the Andes from western Colombia south to western Ecuador and on eastern slope from Colombia south to northern Peru.

Subfamily TROCHILINAE: Typical Hummingbirds

Genus ANDRODON Gould

Androdon Gould, 1863, Ann. Mag. Nat. Hist. (3)12: 247. Type, by monotypy, Androdon aequatorialis Gould.

Androdon aequatorialis Gould. Tooth-billed Hummingbird.

Androdon æquatorialis Gould, 1863, Ann. Mag. Nat. Hist. (3) 12: 247. (Ecuador.)

Habitat.—Montane Evergreen Forest, Tropical Lowland Evergreen Forest (750–1550 m; Tropical and Subtropical zones).

Distribution.—Resident from eastern Panama (eastern Darién) and Colombia (east to Magdalena Valley) south along the Pacific coast to northwestern Ecuador.

Genus DORYFERA Gould

Doryfera Gould, 1847, Proc. Zool. Soc. London, p. 95. Type, by subsequent designation (G. R. Gray, 1855), Trochilus ludovicae Bourcier and Mulsant.

Helianthea α Hemistephania Reichenbach, 1854, J. Ornithol. 1 (Beil. zu Extrah.): 12. Type, by monotypy, Trochilus ludovicæ Bourcier and Mulsant.

Doryfera ludovicae (Bourcier and Mulsant). Green-fronted Lancebill.

Trochilus ludovicæ Bourcier and Mulsant, 1847, Ann. Sci. Phys. Nat. Agric. Ind. Soc.
 R., etc., Lyon 10: [136]. (Colombia = Buena Vista, 4500 feet, Eastern Andes above Villavicencio, Colombia.)

Habitat.—Montane Evergreen Forest, usually associated with rushing streams and waterfalls (750–2800 m; Subtropical Zone).

Distribution.—Resident in the highlands of central Costa Rica (primarily the Caribbean slope of the Cordillera Central), Panama (Chiriquí, Veraguas, eastern Darién), and in the Andes of South America from Colombia and western Venezuela south to northern Bolivia.

Genus PHAEOCHROA Gould

Phæochroa Gould, 1861, Introd. Trochil., p. 54. Type, by subsequent designation (Elliot, 1879), Trochilus cuvierii DeLattre and Bourcier.

Phaeochroa cuvierii (DeLattre and Bourcier). Scaly-breasted Hummingbird.

Trochilus Cuvierii DeLattre and Bourcier, 1846, Rev. Zool. [Paris] 9: 310. (isthme de Panama et Teleman, Amérique centrale.)

Habitat.—Secondary Forest, Second-growth Scrub, Tropical Lowland Evergreen Forest (0–1200 m; Tropical Zone).

Distribution.—Resident [roberti group] on the Caribbean slope from eastern Chiapas, northern Guatemala, and Belize south to northeastern Costa Rica (Puerto Viejo de Sarapiquí); and [cuvierii group] from central Costa Rica (primarily on the Pacific slope) south through Panama (both slopes) to northern Colombia.

Notes.—Groups: P. roberti (Salvin, 1861) [Robert's Hummingbird] and P. cuvierii [Cuvier's Hummingbird].

Genus CAMPYLOPTERUS Swainson

Campylopterus Swainson, 1827, Zool. J. 3: 358. Type, by subsequent designation (G. R. Gray, 1840), C. latipennis (Lath.) = Trochilus largipennis Boddaert.

Pampa Reichenbach, 1854, J. Ornithol. 1 (Beil. zu Beitr.): 11. Type, by monotypy, P. campyloptera Reichenbach = Ornismya pampa Lesson = Trochilus curvipennis Deppe.

Campylopterus curvipennis (Deppe). Wedge-tailed Sabrewing.

Trochilus curvipennis "Lichtenst[ein]." W. Deppe, 1830, Preis.-Verz. Säugeth. Vögel, etc., Mex., p. 1, no. 32. (Mexico.)

Habitat.—Tropical Lowland Evergreen Forest, Secondary Forest (0–1400 m; Tropical and lower Subtropical zones).

Distribution.—Resident [curvipennis group] on the Gulf-Caribbean slope from southeastern San Luis Potos' and southern Tamaulipas south through Veracruz and northeastern Puebla to northern Oaxaca; and [pampa group] in the Yucatan Peninsula, Tabasco, northeastern Chiapas, Guatemala (Péten and Alta Verapaz), Belize, and eastern Honduras (Olancho).

Notes.—Also known as Curve-winged Sabrewing. Groups: *C. curvipennis* [Curve-winged Sabrewing] and *C. pampa* (Lesson, 1832) [Wedge-tailed Sabrewing]. *Campylopterus curvipennis* and *C. excellens* may be conspecific; they constitute a superspecies (Sibley and Monroe 1990). Further study of this complex is needed.

Campylopterus excellens (Wetmore). Long-tailed Sabrewing.

Pampa pampa excellens Wetmore, 1941, Proc. Biol. Soc. Wash. 54: 207. (Volcán san Martín, 3300 feet, Tuxtla Mountains, Vera Cruz, México.)

Habitat.—Tropical Lowland Evergreen Forest, Montane Evergreen Forest (0-1050 m; Tropical and lower Subtropical zones).

Distribution.—Resident in southern Veracruz (Sierra de los Tuxtlas and Jesús Carranza) and northwestern Chiapas.

Notes.—Recognition of *C. excellens* as a distinct species follows Lowery and Dalquest (1951). See comments under *C. curvipennis*.

Campylopterus rufus Lesson. Rufous Sabrewing.

Campylopterus rufus Lesson, 1840, Rev. Zool. [Paris] 3: 73. (No locality given = Guatemala.)

Habitat.—Montane Evergreen Forest, Secondary Forest (950–2000 m; upper Tropical and Subtropical zones).

Distribution.—Resident in southeastern Oaxaca (Sierra Madre de Chiapas), Chiapas, central Guatemala, and El Salvador. Records from Oaxaca west of the Isthmus of Tehuantepec are doubtful (Binford 1989).

Campylopterus hemileucurus (Deppe). Violet Sabrewing.

Trochilus hemileucurus "Lichtenst[ein]." W. Deppe, 1830, Preis.-Verz. Säugeth. Vögel, etc., Mex., p. 1, no. 33. (Mexico.)

Habitat.—Montane Evergreen Forest (900–2400 m; upper Tropical and Subtropical, occasionally lower Tropical zones).

Distribution.—Resident in the foothills and highlands of Middle America from southern Mexico (Guerrero, Veracruz, Oaxaca, Tabasco, and Chiapas) and Belize south to western Panama (Chiriquí, Veraguas, Herrera, Los Santos), ranging in nonbreeding season to lower elevations, occasionally to sea level.

Genus FLORISUGA Bonaparte

Florisuga Bonaparte, March 1850, Consp. Gen. Avium 1(1): 73. Type, by subsequent designation (Bonaparte, April 1850), Trochilus mellivorus Linnaeus.

Florisuga mellivora (Linnaeus). White-necked Jacobin.

Trochilus mellivorus Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 121. Based on "The Whitebelly'd Humming Bird" Edwards, Nat. Hist. Birds 1: 35, pl. 35, upper fig. (in India, error = Surinam.)

Habitat.—Tropical Lowland Evergreen Forest, Secondary Forest, Tropical Deciduous Forest (0–900 m; Tropical and, locally, lower Subtropical zones).

Distribution.—Resident on the Gulf-Caribbean slope of Middle America from southern Veracruz and northern Oaxaca south through Chiapas, northern Guatemala, and Belize to Honduras, on both slopes of Nicaragua, Costa Rica (rare in dry northwest), and Panama, and in South America from Colombia, Venezuela, Trinidad, Tobago, and the Guianas south, west of the Andes to western Ecuador and east of the Andes to central Bolivia and Amazonian Brazil.

Accidental in the southern Lesser Antilles (Carriacou) and Netherlands Antilles (Aruba, Curação).

Genus COLIBRI Spix

Colibri Spix, 1824, Avium Spec. Nov. Bras. 1: 80. Type, by subsequent designation (G. R. Gray, 1855), Trochilus serrirostris Vieillot.

Colibri delphinae (Lesson). Brown Violet-ear.

Ornismya Delphinæ Lesson, 1839, Rev. Zool. [Paris] 2: 44. (No locality given = Santa Fé de Bogotá, Colombia.)

Habitat.—Montane Evergreen Forest, Secondary Forest, Tropical Lowland Evergreen Forest (600–2500 m; Upper Tropical and Subtropical zones).

Distribution.—Resident locally in foothills on the Caribbean slope of Middle America from southern Belize and eastern Guatemala south to Costa Rica and Panama (locally in highlands on both slopes), and locally in South America from Colombia, Venezuela, Trinidad, and the Guianas south, on the western slope of the Andes to northwestern Ecuador and on the eastern slope to central Bolivia, also widely scattered records in northern and eastern Brazil.

Colibri thalassinus (Swainson). Green Violet-ear.

Trochilus thalassinus Swainson, 1827, Philos. Mag. (n.s.) 1: 441. (Temiscaltipec, Mexico = Temascaltepec, México.)

Habitat.—Secondary Forest, Second-growth Scrub (1400–3000 m; upper Tropical and Subtropical zones, in South America also Temperate Zone).

Distribution.—Resident [thalassinus group] from Jalisco, Guanajuato, San Luis Potosí, and Veracruz south through the highlands of southern Mexico and Belize to Guatemala, El Salvador, Honduras, and northwestern Nicaragua; and [cyanotus group] in the mountains of Costa Rica and western Panama (Chiriquí, Veraguas); and in montane South America from Colombia and northern Venezuela south in Western Andes to western Ecuador and in Eastern Andes to central Bolivia.

Ranges [thalassinus group] rarely north to Texas, casually to Arkansas (four records).

Accidental [thalassinus group] in Ontario, Michigan, Missouri, Alabama, and North Carolina (Asheville); sight reports for southern Baja California and Yucatán. Reports from California are not adequately documented.

Notes.—Groups: C. thalassinus [Green Violet-ear] and C. cyanotus Bourcier, 1843 [Mountain Violet-ear].

Genus ANTHRACOTHORAX Boie

Anthracothorax Boie, 1831, Isis von Oken, col. 545. Type, by subsequent designation (Elliot, 1879), Trochilus violicauda Boddaert = Trochilus viridigula Boddaert.

Anthracothorax prevostii (Lesson). Green-breasted Mango.

Trochilus prevostii Lesson, 1832, Hist. Nat. Colibris, livr. 13, p. 87, pl. 24. (No locality given = Veracruz, Mexico; Cory, 1918, Field Mus. Nat. Hist. Zool. Ser. 13.)

Habitat.—Secondary Forest, Gallery Forest, (0-1000 m; Tropical Zone).

Distribution.—Resident [prevostii group] from San Luis Potosí and southern Tamaulipas south to northern Oaxaca, Veracruz, and Chiapas, and along both slopes of Middle America (including the Yucatan Peninsula and larger islands offshore, Hunting Cay off Belize, the Bay Islands off Honduras, and on Providencia and San Andrés islands in the Caribbean Sea off Nicaragua) to central Costa Rica and northwestern Panama (Bocas del Toro), also in central and northeastern Colombia and northern Venezuela; and [iridescens group] in the arid Pacific lowlands from western Ecuador south to northwestern Peru. Northeasternmost populations in Mexico are migratory to southern Mexico.

Accidental [prevostii group] in southern Texas (Corpus Christi; 6-27 Jan. 1992; 1992, Amer. Birds 46: 289; photograph in DeBenedictis 1994b).

Notes.—Also known as Prevost's Mango. The *iridescens* group may be a species, A. *iridescens* (Gould, 1861) [Ecuadorian Mango], or (e.g., Hilty and Brown 1986) a subspecies of A. nigricollis (Sibley and Monroe 1990). Anthracothorax nigricollis, A. veraguensis, and A. prevostii are closely related and constitute a superspecies.

Anthracothorax nigricollis (Vieillot). Black-throated Mango.

Trochilus nigricollis Vieillot, 1817, Nouv. Dict. Hist. Nat. (nouv. éd.) 7: 349. (Brazil.)

Habitat.—Secondary Forest, Gallery Forest, Tropical Lowland Evergreen Forest Edge, Second-growth Scrub (0–1000 m; Tropical and lower Subtropical zones).

Distribution.—Resident in central and eastern Panama (from the Canal area eastward), and in South America from Colombia, Venezuela, Tobago, Trinidad, and the Guianas south, east of the Andes, to central Bolivia, Paraguay, and northeastern Argentina.

Notes.—See comments under A. prevostii.

Anthracothorax veraguensis Reichenbach. Veraguan Mango.

Anthracothorax veraguensis Reichenbach, 1855, Trochil. Enum., p. 9, pl. 794, fig. 4848. (Veragua, designated as David, Chiriquí, by Wetmore, 1968, Smiths. Misc. Coll. 150, pt. 2, p. 292.)

Habitat.—Secondary Forest, Gallery Forest (Tropical Zone).

Distribution.—Resident in the Pacific lowlands of western Panama (possibly also southwestern Costa Rica) from Chiriquí east to southern Coclé, and on the Caribbean slope in Bocas del Toro and the Canal area.

Notes.—Formerly treated as a subspecies of A. prevostii, but see Olson (1993a). See comments under A. prevostii.

Anthracothorax dominicus (Linnaeus). Antillean Mango.

Trochilus dominicus Linnaeus, 1766, Syst. Nat. (ed. 12) 1: 191. Based on "Le Colibry de S. Domingue" Brisson, Ornithologie 3: 672, pl. 35, fig. 4. (in Dominica = Hispaniola.)

Habitat.—Tropical Lowland Evergreen Forest, Tropical Deciduous Forest, Secondary Forest (0–1500 m).

Distribution.—Resident on Hispaniola (including Gonâve, Tortue, and Beata islands, and île-à-Vache), central and western Puerto Rico (including Vieques, Culebra, and Culebrita islands), and the Virgin Islands (Anegada, formerly on St. Thomas and St. John).

Anthracothorax viridis (Audebert and Vieillot). Green Mango.

Trochilus viridis Audebert and Vieillot, 1801, Ois. Dorés 1: 34, pl. 15. (îles de l'Amérique Septentrionale = Puerto Rico.)

Habitat.—Tropical Lowland Evergreen Forest, Secondary Forest (0-900 m). **Distribution.**—Resident on Puerto Rico. Accidental in the Virgin Islands (St. Thomas).

Anthracothorax mango (Linnaeus). Jamaican Mango.

Trochilus Mango Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 121. Based on Mellivora mango Albin, Nat. Hist. Birds 2: 45, pl. 49, fig. 1. (in Jamaica.)

Habitat.—Tropical Lowland Evergreen Forest, Secondary Forest. **Distribution.**—Resident on Jamaica.

Genus EULAMPIS Boie

Eulampis Boie, 1831, Isis von Oken, col. 547. Type, by subsequent designation (G. R. Gray, 1840), E. aurata (Audebert) i.e. Gmelin = Trochilus jugularis Linnaeus.

Anthracothorax γ Sericotes Reichenbach, 1854, J. Ornithol. 1 (Beil. zu Extrah.): 11. Type, by subsequent designation (G. R. Gray, 1855), Trochilus holosericeus Linnaeus.

Eulampis jugularis (Linnaeus). Purple-throated Carib.

Trochilus jugularis Linnaeus, 1766, Syst. Nat. (ed. 12) 1: 190. Based on the "Redbreasted Humming-bird" Edwards, Glean. Nat. Hist. 2: 118, pl. 266, fig. 1. (in Cayenna, Surinamo, error = Lesser Antilles.)

Habitat.—Tropical Lowland Evergreen Forest, Secondary Forest (0-1100 m). Distribution.—Resident in the Lesser Antilles (Saba, St. Eustatius, St. Kitts, Nevis, Montserrat, Antigua, Guadeloupe, Dominica, Martinique, St. Lucia, and St. Vincent).

Casual in the Virgin Islands (St. Croix, St. John), Barbuda, Désirade, îles des Saintes, and Bequia; sight reports for Barbados and Grenada.

Notes.—Also known as Garnet-throated Hummingbird, a name now restricted to Lamprolaima rhami.

Eulampis holosericeus (Linnaeus). Green-throated Carib.

Trochilus holosericeus Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 120. Based on "The Black-belly'd Green Humming Bird" Edwards, Nat. Hist. Birds 1: 36, pl. 36. (in America = Lesser Antilles.)

Habitat.—Second-growth Scrub, Secondary Forest (0–900 m).

Distribution.—Resident in Puerto Rico (primarily eastern), the Virgin Islands, and Lesser Antilles (south to St. Vincent, Barbados, the northern Grenadines, and Grenada).

Accidental on Tobago (specimen, USNM).

Notes.—Also known as Emerald-throated Hummingbird. Formerly placed in the monotypic genus Sericotes.

Genus CHRYSOLAMPIS Boie

Chrysolampis Boie, 1831, Isis von Oken, col. 546. Type, by subsequent designation (G. R. Gray, 1840), Trochilus "moschita" [= mosquitus] Linnaeus.

Chrysolampis mosquitus (Linnaeus). Ruby-topaz Hummingbird.

Trochilus Mosquitus Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 120. Based on Trochilus rectricibus æqualibus ferrugineis Linnaeus, Mus. Adolphi Friderici 2: [?]. (in Indiis, error = Surinam.)

Habitat.—Gallery Forest, Tropical Deciduous Forest, Low Seasonally Wet Grassland (0–1300 m).

Distribution.—Resident from Colombia, Venezuela (including islands from the Netherlands Antilles east to Tobago and Trinidad), and the Guianas south to extreme eastern Bolivia and southeastern Brazil (generally absent from Amazonia).

Accidental in Panama (El Real, Darién, 27 January 1985, photograph in VIREO; Braun and Wolf 1987). A sight report for Grenada.

Genus ORTHORHYNCUS Lacépède

Orthorhyncus Lacépède, 1799, Tabl. Mamm. Ois., p. 9. Type, by subsequent designation (G. R. Gray, 1840), Trochilus cristatus Linnaeus.

Orthorhyncus cristatus (Linnaeus). Antillean Crested Hummingbird.

Trochilus cristatus Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 121. Based on "The Crested Humming Bird" Edwards, Nat. Hist. Birds 1: 37, pl. 37. (in America = Barbados, Lesser Antilles.)

Habitat.—Second-growth Scrub, Secondary Forest, Tropical Lowland Evergreen Forest (0–1000 m).

Distribution.—Resident in Puerto Rico (including on Vieques and Culebra islands), the Virgin Islands, and Lesser Antilles south to Grenada.

A specimen obtained in Texas (Galveston Island, February 1967; Pulich 1968) is of questionable origin (DeBenedictis 1992, T.O.S. 1995).

Genus KLAIS Reichenbach

Basilinna ß Klais Reichenbach, 1854, J. Ornithol. 1 (Beil. zu Extrah.): 13. Type, by monotypy, Trochilus guimeti Bourcier.

Klais guimeti (Bourcier). Violet-headed Hummingbird.

Trochilus Guimeti Bourcier, 1843, Rev. Zool. [Paris] 6: 72. (à Caracas, capitale de Vénezuéla, la Colombie = Caracas, Venezuela.)

Habitat.—Montane Evergreen Forest, Tropical Lowland Evergreen Forest, Secondary Forest (300–1400 m; upper Tropical and Subtropical zones, rarely lower Tropical Zone).

Distribution.—Resident on the Caribbean slope of eastern Honduras (west to the Sula Valley) and Nicaragua, in Costa Rica (Caribbean slope and the Pacific southwest) and Panama (both slopes), and in South America from eastern Colombia and western and northern Venezuela south to central Bolivia and extreme western Brazil.

Genus ABEILLIA Bonaparte

Abeillia Bonaparte, 1850, Consp. Gen. Avium 1(1): 79. Type, by original designation, Abeillia typica Bonaparte = Ornismya abeillei Lesson and DeLattre.

Abeillia abeillei (DeLattre and Lesson). Emerald-chinned Hummingbird.

Ornismya Abeillei DeLattre and Lesson, in Lesson and DeLattre, 1839, Rev. Zool. [Paris] 2: 16. (Jalapa [Veracruz].)

Habitat.—Montane Evergreen Forest, Secondary Forest (1000–1850 m; Tropical and Subtropical zones).

Distribution.—Resident in the highlands from Veracruz, southeastern Oaxaca (Sierra Madre de Chiapas), and Chiapas south through the highlands of Guatemala, El Salvador, and western Honduras to north-central Nicaragua.

Genus LOPHORNIS Lesson

Lophornis Lesson, 1829, Hist. Nat. Ois.-Mouches, p. xxxvii. Type, by subsequent designation (G. R. Gray, 1840), L. ornata (L.) Less. Ois. M., pl. 41 = Trochilus ornatus Boddaert.

Paphosia Mulsant and J. and E. Verreaux, 1866, Mém. Soc. Imp. Sci. Nat. Cherbourg 12: 219. Type, by monotypy, Ornismya helenae DeLattre.

Lophornis brachylopha Moore. Short-crested Coquette.

Lophornis delattrei brachylopha Moore, 1949, Proc. Biol. Soc. Wash. 62: 103. (San Vicente de Benitez, altitude 1500 feet, Guerrero, México.)

Habitat.—Montane Evergreen Forest (500-1350 m; .

Distribution.—Resident locally in the Sierra Madre del Sur of Guerrero.

Notes.—Banks (1990b) provided rationale for treating *L. brachylopha* as a species distinct from *L. delattrei*.

Lophornis delattrei (Lesson). Rufous-crested Coquette.

Ornismya (Lophorinus) De Lattrei Lesson, 1839, Rev. Zool. [Paris] 2: 19. (No locality given = Peru.)

Habitat.—Secondary Forest, Tropical Lowland Evergreen Forest, Montane Evergreen Forest Edge (0-2000 m; Tropical and Subtropical zones).

Distribution.—Resident locally in central Costa Rica (San José region, known from four specimens; unrecorded since 1906) and Panama (throughout, but most frequent in central Panama); and the upper Magdalena Valley of Colombia and along the base of the Eastern Andes from northern Colombia to central Bolivia.

Lophornis helenae (DeLattre). Black-crested Coquette.

Ornismya Helenæ DeLattre, 1843, Rev. Zool. [Paris] 6: 133. (Vera-Pax, propte, Petinck in republica Guatimala = Vera Paz, Guatemala.)

Habitat.—Montane Evergreen Forest, Tropical Lowland Evergreen Forest, Secondary Forest (300–1450 m; Tropical and lower Subtropical zones).

Distribution.—Resident on the Gulf-Caribbean slope of Middle America from Veracruz, northern Oaxaca, and Chiapas (also Pacific slope) south to central Costa Rica (on Caribbean slope, vagrant to the vicinity of San José and the Pacific slope).

Reports from southern Texas are erroneous (T.O.S. 1995).

Notes.—This species and the following are often placed in the genus *Paphosia*.

Lophornis adorabilis Salvin. White-crested Coquette.

Lophornis adorabilis Salvin, 1870, Proc. Zool. Soc. London, p. 207. (Bugaba, Chiriquí, Panama.)

Habitat.—Tropical Lowland Evergreen Forest Edge, Secondary Forest, Second-growth Scrub (300–1200 m; upper Tropical and Subtropical zones).

Distribution.—Resident in central and southwestern Costa Rica (north to the Cordillera Central) and extreme western Panama (western Chiriquí); a report from Isla Cébaco, Panama, is considered doubtful.

Notes.—Also known as Adorable Coquette. See comments under L. helenae.

Genus DISCOSURA Bonaparte

Discosura Bonaparte, 1850, Consp. Gen. Avium. 1(1): 84. Type, by subsequent designation (G. R. Gray, 1855), Trochilus longicaudus Gmelin.

Popelairia Reichenbach, 1854, J. Ornithol. 1 (Beil. zu Extrah.): 12. Type, by monotypy, Popelairia tricholopha Reichenbach = Trochilus popelairii Du Bus de Gisignies.

Discosura conversii (Bourcier and Mulsant). Green Thorntail.

Trochilus Conversii Bourcier and Mulsant, 1846, Ann. Sci. Phys. Nat. Agric. Ind. Soc. R., etc., Lyon 9: 313, pl. [9]. (Bogotá, Colombia.)

Habitat.—Montane Evergreen Forest, Tropical Lowland Evergreen Forest Edge (700–1400 m; upper Tropical and Subtropical zones).

Distribution.—Resident in Costa Rica (Caribbean slope north to the Cordillera Central), locally in Panama (recorded eastern Chiriquí, Veraguas, Coclé, the Canal area, eastern Panamá province, and eastern Darién), and on the Pacific slope of western Colombia and western Ecuador.

Notes.—Often placed in the genus *Popelairia* Reichenbach, 1854 (e.g., Sibley and Monroe 1990).

Genus CHLOROSTILBON Gould

Chlorostilbon Gould, 1853, Monogr. Trochil., pt. 5, pl. [14] and text. Type, by monotypy, Chlorostilbon prasinus Gould (not other authors) = Trochilus pucherani Bourcier = Ornismya aureo-ventris d'Orbigny and Lafresnaye.

Chlorestes & Riccordia Reichenbach, 1854, J. Ornithol. 1 (Beil. zu Extrah.): 8. Type, by subsequent designation (G. R. Gray, 1855), Riccordia ramondii Reichenbach = Ornismya ricordii Gervais.

Chlorostilbon auriceps (Gould). Golden-crowned Emerald.

Trochilus auriceps Gould, 1852, Jardine's Contr. Orn., p. 137. (Mexico.)

Habitat.—Second-growth Scrub, Secondary Forest, Tropical Deciduous Forest Edge (0–1800 m; Tropical and Subtropical zones).

Distribution.—Resident on the Pacific slope from Sinaloa south to southern Oaxaca (Waiat), and inland to southern Morelos.

Notes.—Formerly considered a subspecies of *C. canivetii*, but see Howell (1993). See comments under *C. canivetii*.

Chlorostilbon forficatus Ridgway. Cozumel Emerald.

Chlorostilbon forficatus Ridgway, 1885, Descr. New Species Birds, Cozumel Is., p. 3 (Cozumel Island, Yucatan.)

Habitat.—Second-growth Scrub, Secondary Forest (Tropical Zone).

Distribution.—Resident on Cozumel Island, rarely on Isla Mujeres, Quintana Roo, Mexico. Historical reports from Isla Holbox are unreliable.

Notes.—Formerly considered a subspecies of *C. canivetii*, but see Howell (1993). See comments under *C. canivetii*.

Chlorostilbon canivetii (Lesson). Canivet's Emerald.

Ornismya canivetii Lesson, 1832, Hist. Nat. Colibris, livr. 13, p. 174, pl. 37, 38. (Brésil, error = Jalapa, Veracruz.)

Habitat.—Tropical Deciduous Forest Edge, Second-growth Scrub, Secondary Forest, Tropical Lowland Evergreen Forest Edge (0–1900 m; Tropical and Subtropical zones).

Distribution.—Resident on the Gulf-Caribbean slope from San Luis Potosí and southern Tamaulipas south through northern and southeastern Oaxaca to northern Guatemala and Belize (including Holbox Island off the Yucatan peninsula, and the Bay and Hog islands off Honduras), and on both slopes of Middle America from southeastern Chiapas, western and southern Guatemala, El Salvador, and Honduras south to Nicaragua and northern Costa Rica (primarily Guanacaste, but also to central plateau region).

Notes.—This species formerly included *C. auriceps* and *C. forficatus*; the complex was known as Fork-tailed Emerald. It presently incudes *C. osberti* Gould, 1860, and *C. salvini* Cabanis and Heine, 1860, which Howell (1993) recommended combining as a species, *C. salvini* [Salvin's Emerald]. The expanded *C. canivetii* sometimes (Eisenmann 1955) includes *C. assimilis*, and that complex along with several South American forms has been merged (Meyer de Schauensee 1966) under the comprehensive name *C. mellisugus* (Linnaeus, 1758), Blue-tailed Emerald. See Stiles (1996a).

Chlorostilbon assimilis Lawrence. Garden Emerald.

Chlorostilbon assimilis Lawrence, 1861, Ann. Lyc. Nat. Hist. N. Y. 7: 292. (Atlantic side of the Isthmus of Panama, along the line of the Panama Railroad.)

Habitat.—Tropical Lowland Evergreen Forest Edge, Second-growth Scrub, Secondary Forest (0-800 m; Tropical and lower Subtropical zones).

Distribution.—Resident in southwestern Costa Rica (north to the Térraba region) and Panama (Pacific slope east to western Darién, including Coiba, Pearl, and many smaller islands), also Caribbean slope in Bocas del Toro and Canal area.

Notes.—Also known as Allied Emerald. See comments under C. canivetii.

Chlorostilbon ricordii (Gervais). Cuban Emerald.

Ornismya Ricordii Gervais, 1835, Mag. Zool. [Paris] 5: cl. 2, pl. 41, 42. (Santiago de Cuba = Santiago, Cuba.)

Habitat.—Tropical Lowland Evergreen Forest, Secondary Forest, Pine Forest (0-1200 m).

Distribution.—Resident in the Bahamas (Abaco, including offshore cays, Grand Bahama, Andros, and Green Cay), and on Cuba (including offshore cays) and the Isle of Pines.

Sight reports from southern and east-central Florida are unsubstantiated (DeBenedictis 1991, Robertson and Woolfenden 1992).

Chlorostilbon bracei (Lawrence). Brace's Emerald.

Sporadinus Bracei Lawrence, 1877, Ann. N. Y. Acad. Sci. 1: 50. (New Providence, Bahama Islands.)

Habitat.—Unknown.

Distribution.—EXTINCT; formerly *resident* on New Providence Island in the Bahamas (Abaco, where known from the type specimen only, although fossils from the type locality are probably referable to this species).

Notes.—For recognition of this form as a species, see Graves and Olson (1987).

Chlorostilbon swainsonii (Lesson). Hispaniolan Emerald.

Ornismya Swainsonii Lesson, 1829, Hist. Nat., Ois.-Mouches, p. "xvij" [= xvii]; 1830, p. 197, pl. 70. (le Brésil, error = Hispaniola.)

Habitat.—Montane Evergreen Forest, Tropical Lowland Evergreen Forest, Secondary Forest, Second-growth Scrub (0-2400 m).

Distribution.—Resident on Hispaniola; reports from Gonâve Island are unsubstantiated.

Chlorostilbon maugaeus (Audebert and Vieillot). Puerto Rican Emerald.

Trochilus Maugæus Audebert and Vieillot, 1801, Ois. Dorés 1: 77, 79, pl. 37, 38. (Puerto Rico.)

Habitat.—Montane Evergreen Forest, Tropical Lowland Evergreen Forest, Tropical Deciduous Forest, Secondary Forest, Second-growth Scrub (0–1000 m)

Distribution.—Resident on Puerto Rico.

Genus CYNANTHUS Swainson

Cynanthus Swainson, 1827, Philos. Mag. (n.s.) 1: 441. Type, by subsequent designation (Stone, 1907), Cynanthus latirostris Swainson.

Phæoptila Gould, 1861, Monogr. Trochil., pt. 5, text to pl. 340. Type, by original designation, Cyanomyia sordida Gould.

Cynanthus sordidus (Gould). Dusky Hummingbird.

Cyanomyia (?) sordida Gould, 1859, Ann. Mag. Nat. Hist. (3)4: 97. ([state of] Oaxaca, Mexico; Binford, 1989, Ornithol. Monogr. 43, p. 338.)

Habitat.—Arid Montane Scrub, Gallery Forest (900–2250 m; Subtropical and lower Temperate zones).

Distribution.—Resident from eastern Michoacán, México, and Morelos south to Oaxaca and Puebla.

Cynanthus latirostris Swainson. Broad-billed Hummingbird.

Cynanthus latirostris Swainson, 1827, Philos. Mag. (n.s.) 1: 441. (Tableland of Mexico = valley of México, near Mexico City.)

Habitat.—Tropical Deciduous Forest, Gallery Forest (0-2100 m; Tropical and lower Subtropical zones).

Distribution.—Breeds [latirostris group] from western Sonora, southeastern Arizona, southwestern New Mexico (Guadalupe Canyon), northern Chihuahua, western Texas (Brewster County, casually), and Tamaulipas south through Mexico (including the Tres Marias Islands) to northern Veracruz, Hidalgo, and Puebla.

Winters [latirostris group] from central Sonora, Chihuahua, and Tamaulipas south through the breeding range, casually north to southern Arizona.

Resident [doubledayi group] in the Pacific lowlands of southern Guerrero, southern Oaxaca, and western Chiapas.

Casual [latirostris group] north to Baja California, California (to Sonoma County), Utah, central Arizona, central and eastern Texas, and southern Louisiana; sight reports to southern Nevada and central New Mexico. Accidental in southern Ontario, Michigan, and Illinois; a sight report for South Carolina.

Notes.—Groups: C. latirostris [Broad-billed Hummingbird] and C. doubledayi (Bourcier, 1847) [Doubleday's Hummingbird]. Howell and Webb (1995) suggested that the two groups should be treated as species.

Genus CYANOPHAIA Reichenbach

Cyanophaia Reichenbach, 1854, J. Ornithol. 1 (Beil. zu Extrah.): 10. Type, by subsequent designation (G. R. Gray, 1855), Trochilus bicolor "Linn." [= Gmelin].

Cyanophaia bicolor (Gmelin). Blue-headed Hummingbird.

Trochilus bicolor Gmelin, 1788, Syst. Nat. 1(1): 496. Based in part on "Saphir-émeraude" Buffon, Hist. Nat. Ois. 6: 26, and the "Sapphire and Emerald Humming-bird" Latham, Gen. Synop. Birds 1(2): 775. (in Guadeloupe, error = Dominica.)

Habitat.—Tropical Lowland Evergreen Forest, Secondary Forest (0-900 m). Distribution.—Resident on Dominica and Martinique, in the Lesser Antilles.

Genus THALURANIA Gould

Thalurania Gould, 1848, Proc. Zool. Soc. London, p. 13. Type, by subsequent designation (G. R. Gray, 1855), Trochilus furcatus Gmelin.

Thalurania ridgwayi Nelson. Mexican Woodnymph.

Thalurania ridgwayi Nelson, 1900, Auk, 17, p. 262. (San Sebastian, Jalisco, México.)

Habitat.—Montane Evergreen Forest, Tropical Lowland Evergreen Forest, Secondary Forest (200-2100 m).

Distribution.—Pacific slope of Nayarit, western Jalisco, and Colima.

Notes.—Escalante-Pliego and Peterson (1992) provided reasons for treating T. ridgwayi and T. fannyi as species distinct from T. colombica.

Thalurania colombica (Bourcier). Violet-crowned Woodnymph.

Ornismya Colombica Bourcier, 1843, Rev. Zool. [Paris], 6, p. 2. (in Colombie = San Agustín, Magdalena Valley, Colombia.)

Habitat.—Tropical Lowland Evergreen Forest, Secondary Forest, Montane Evergreen Forest, Tropical Deciduous Forest (0–1900 m).

Distribution.—Lowlands [townsendi group] of Caribbean slope from Guatemala and Belize south to Costa Rica and western and central Panama (east to Canal area and eastern Panamá province); lowlands to 1900 m [colombica group] of northern Colombia and western Venezuela.

Notes.—Groups: T. townsendi Ridgway, 1888 [Violet-crowned Woodnymph], and T. colombica [Colombian Woodnymph]. See Thalurania ridgwayi.

Thalurania fannyi (DeLattre and Bourcier). Green-crowned Woodnymph.

Trochilus Fannyi DeLattre and Bourcier, 1846, Rev. Zool. [Paris], 9, p. 310. (Río Dagua, near Buenaventura, Colombia.)

Habitat.—Tropical Deciduous Forest (0-800 m).

Distribution.—[fannyi group] eastern Panama (eastern Colón, Darién, and eastern San Blas) and northwestern Colombia; and [hypochlora group] Pacific slope of southwestern Colombia south to northwestern Peru.

Notes.—Groups: T. fannyi [Green-crowned Woodnymph], and T. hypochlora Gould 1871 [Emerald-bellied Woodnymph]. See Thalurania ridgwayi.

Genus PANTERPE Cabanis and Heine

Panterpe Cabanis and Heine, 1860, Mus. Heineanum 3: 43 (footnote). Type, by original designation, Panterpe insignis Cabanis and Heine.

Panterpe insignis Cabanis and Heine. Fiery-throated Hummingbird.

Panterpe insignis Cabanis and Heine, 1860, Mus. Heineanum 3: 43 (footnote). (Costa Rica.)

Habitat.—Montane Evergreen Forest Edge, Second-growth Scrub, Paramo Grassland (1400–3100 m; Subtropical and Temperate zones).

Distribution.—Resident in Costa Rica (cordilleras de Talamanca and Central) and western Panama (western Chiriquí and western Bocas del Toro).

Genus DAMOPHILA Reichenbach

Damophila Reichenbach, 1854, J. Ornithol. 1 (Beil. zu Extrah.): 7. Type, by subsequent designation (Elliot, 1879), T. julie Bourcier = Ornismyia julie Bourcier.

Damophila julie (Bourcier). Violet-bellied Hummingbird.

Ornismyia Julie Bourcier, 1842, Rev. Zool. [Paris] 5: 373. (Tunja en Colombie = Tunja, Colombia.)

Habitat.—Tropical Lowland Evergreen Forest Edge, Secondary Forest, Tropical Deciduous Forest (0–900 m; Tropical Zone).

Distribution.—Resident in central and eastern Panama (from northern Coclé and the Canal area eastward), western Colombia, and western Ecuador; specimens reported from "Costa Rica" are probably mislabeled (Stiles and Skutch 1989).

Genus LEPIDOPYGA Reichenbach

Agyrtria γ Lepidopyga Reichenbach, 1855, Trochil. Enum., p. 7. Type, by subsequent designation (Ridgway, 1911), Trochilus goudoti Bourcier.

Lepidopyga coeruleogularis (Gould). Sapphire-throated Hummingbird.

Trochilus (——?) cæruleogularis Gould, 1851, Proc. Zool. Soc. London (1850), p. 163. (Near David, on the north side of the Cordillera, Veragua [Chiriquí, Panama].)

Habitat.—Tropical Lowland Evergreen Forest Edge, Secondary Forest, Second-growth Scrub (0–700 m; Tropical Zone).

Distribution.—Resident in Panama (the Pacific lowlands from western Chiriquí eastward, including Isla Coiba, and the Caribbean lowlands in the Canal area and San Blas) and northern Colombia; an old specimen from "Costa Rica" is probably mislabeled, but there is a sight report from Costa Rica (Stiles and Skutch 1989).

Genus HYLOCHARIS Boie

Hylocharis Boie, 1831, Isis von Oken, col. 546. Type, by subsequent designation (G. R. Gray, 1840), H. sapphirina (Gm.) Boie = Trochilus sapphirinus Gmelin. Basilinna Boie, 1831, Isis von Oken, col. 546. Type, by subsequent designation (G. R. Gray, 1855), Trochilus leucotis Vieillot.

Hylocharis grayi (DeLattre and Bourcier). Blue-headed Sapphire.

Trochilus Grayi DeLattre and Bourcier, 1846, Rev. Zool. [Paris] 9: 307. (Popayán, Nouvelle-Grenade [= Colombia].)

Habitat.—Tropical Lowland Evergreen Forest Edge, Secondary Forest, Mangrove Forest (0–2000 m; Tropical and lower Subtropical zones).

Distribution.—Resident from extreme eastern Panama (near Jaque in southern Darién) south through western and central Colombia to northwestern Ecuador.

Hylocharis eliciae (Bourcier and Mulsant). Blue-throated Goldentail.

Trochilus Eliciæ Bourcier and Mulsant, 1846, Ann. Sci. Phys. Nat. Agric. Ind. Soc. R., etc., Lyon 9: 314. (No locality given.)

Habitat.—Tropical Lowland Evergreen Forest, Gallery Forest, Secondary Forest (0-1100 m; Tropical and lower Subtropical zones).

Distribution.—Resident from Veracruz, Oaxaca, and Chiapas south along both slopes of Central America to Panama (including Isla Coiba) and northwestern Colombia (northwestern Chocó).

Hylocharis leucotis (Vieillot). White-eared Hummingbird.

Trochilus leucotis Vieillot, 1818, Nouv. Dict. Hist. Nat. (nouv. éd.) 23: 428. (au Brésil, error = Orizaba, Veracruz.)

Habitat.—Pine Forest, Pine-Oak Forest (900–3100 m; Subtropical and Temperate zones). Distribution.—Resident from southern Arizona, Sonora, Chihuahua, Coahuila, Nuevo León, and Tamaulipas south through the highlands of Mexico, Guatemala, El Salvador, and Honduras to north-central Nicaragua. Recorded irregularly in summer (and probably breeding) in the mountains of southwestern New Mexico (Animas Mountains) and western Texas (Big Bend, Guadalupe Mountains); northernmost populations are migratory southward.

Casual in southern Texas. Accidental in Mississippi.

Notes.—Hylocharis leucotis and H. xantusii may constitute a superspecies (Mayr and Short 1970). Howell and Webb (1995) placed these two species in the genus Basilinna.

Hylocharis xantusii (Lawrence). Xantus's Hummingbird.

Amazilia Xantusii Lawrence, 1860, Ann. Lyc. Nat. Hist. N. Y. 7: 109. (Cape St. Lucas, South California = San Nicolás, 10 miles northeast of Cape San Lucas, Baja California.)

Habitat.—Arid Lowland Scrub, Arid Montane Scrub (0-1900 m; Tropical to Temperate zones).

Distribution.—Resident in southern Baja California, casually north to lat. 29° N., including islands in the Gulf of California north to Isla San José.

Accidental in California (Ventura, Anza-Borrego Desert); see Hainebach (1992).

Notes.—See comments under H. leucotis.

Genus GOLDMANIA Nelson

Goldmania Nelson, 1911, Smithson. Misc. Collect. 56(21): 1. Type, by original designation, Goldmania violiceps Nelson.

Goldmania violiceps Nelson. Violet-capped Hummingbird.

Goldmania violiceps Nelson, 1911, Smithson. Misc. Collect. 56(21): 1. (Cerro Azul, 3000 feet, northwest of Chepo, Panama.)

Habitat.—Tropical Lowland Evergreen Forest (600-1000 m; Subtropical Zone).

Distribution.—Resident in eastern Panama (eastern Colón, eastern Panamá province and eastern Darién) and extreme northwestern Colombia.

Genus GOETHALSIA Nelson

Goethalsia Nelson, 1912, Smithson. Misc. Collect. 60(3): 6. Type, by original designation, Goethalsia bella Nelson.

Goethalsia bella Nelson. Rufous-cheeked Hummingbird.

Goethalsia bella Nelson, 1912, Smithson. Misc. Collect. 60(3): 7. (Cana, at 2,000 feet altitude, eastern Panama.)

Habitat.—Montane Evergreen Forest (600–150 m; upper Tropical and Subtropical zones). Distribution.—Resident in extreme eastern Panama (cerros Pirre and Sapo in eastern Darién) and adjacent northwestern Colombia (Alturas del Nique in Chocó).

Notes.—Also known as Pirre Hummingbird.

Genus TROCHILUS Linnaeus

Trochilus Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 119. Type, by subsequent designation (G. R. Gray, 1840), Trochilus polytmus Linnaeus.

Trochilus polytmus Linnaeus. Streamertail.

Trochilus Polytmus Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 120. Based mainly on Polytmus viridans aureo varie splendens, etc. Brown, Jamaica, p. 145, and the "Longtailed Black-cap Humming Bird" Edwards, Nat. Hist. Birds 1: 34, pl. 34. (in America = Jamaica.)

Habitat.—Montane Evergreen Forest, Tropical Lowland Evergreen Forest, Secondary Forest (0-1500 m).

Distribution.—Resident [polytmus group] in western and central Jamaica (west of the Morant River); and [scitulus group] in eastern Jamaica (John Crow Mountains, and east of the Morant River).

Notes.—The two groups differ in bill color, display, and vocalizations, with an apparent narrow hybrid zone between them; some authors suggest that these be recognized as distinct species, *T. polytmus* [Western Streamertail] and *T. scitulus* (Brewster and Bangs, 1901) [Eastern Streamertail]. For discussions, see Schuchmann (1978) and Gill et al. (1973).

Genus AMAZILIA Lesson

Amazilia Lesson, 1843, Echo Monde Savant (2)7: col. 757. Type, by subsequent designation (Stone, 1918), Ornismia cinnamomea Less[on] (= O. rutila DeLattre) = Ornismya rutila DeLattre.

Saucerottia Bonaparte, 1850, Consp. Gen. Avium 1(1): 77. Type, by original designation, Saucerottia typica Bonaparte = Trochilus saucerrottei DeLattre and Bourcier. Polyerata Heine, 1863, J. Ornithol. 11: 194. Type, by monotypy, Trochilus amabilis Gould.

Amazilia candida (Bourcier and Mulsant). White-bellied Emerald.

Trochilus candidus Bourcier and Mulsant, 1846, Ann. Sci. Phys. Nat. Agric. Ind. Soc. R., etc., Lyon 9: 326. (Cobán, Alta Verapaz, Guatemala.)

Habitat.—Tropical Lowland Evergreen Forest, Tropical Deciduous Forest (0–1600 m; Tropical and lower Subtropical zones).

Distribution.—Resident (mostly) from southeastern San Luis Potosí and northern Veracruz south along the Gulf-Caribbean slope of Middle America (including the Yucatan Peninsula, also Pacific lowlands of Chiapas and Guatemala) to Honduras, and Nicaragua, where also in north-central highlands, and, probably only as a vagrant, Costa Rica (south to Osa Peninsula). There are winter records for the Pacific slope of Oaxaca (Binford 1989).

Amazilia luciae (Lawrence). Honduran Emerald.

Thaumatias Luciæ Lawrence, 1867, Proc. Acad. Nat. Sci. Philadelphia 19: 233. (Honduras.)

Habitat.—Tropical Deciduous Forest (Tropical Zone).

Distribution.—Resident in Honduras (Caribbean lowlands from Cofradía east to Catacamas).

Amazilia amabilis (Gould). Blue-chested Hummingbird.

Trochilus (———?) amabilis Gould, 1853, Proc. Zool. Soc. London (1851), p. 115. (New Grenada = Colombia.)

Habitat.—Tropical Lowland Evergreen Forest Edge, Secondary Forest (Tropical and lower Subtropical zones).

Distribution.—Resident on the Caribbean slope of Nicaragua and Costa Rica, and in

Panama (Caribbean slope throughout, and Pacific slope from eastern Panamá province eastward), Colombia (east to the Magdalena Valley, and south along the Pacific coast) and western Ecuador.

Notes.—Amazilia amabilis and A. decora constitute a superspecies (Sibley and Monroe 1990).

Amazilia decora (Salvin). Charming Hummingbird.

Polyerata decora Salvin, 1891, Ann. Mag. Nat. Hist. (6)7: 377. (western slopes of the Volcano of Chiriqui [Panama].)

Habitat.—Tropical Lowland Evergreen Forest Edge, Secondary Forest (Tropical and lower Subtropical zones).

Distribution.—Resident on the Pacific slope of southwestern Costa Rica (El General-Térraba-Golfo Dulce region) and extreme western Panama (western Chiriquí).

Notes.—See comments under A. amabilis.

Amazilia boucardi (Mulsant). Mangrove Hummingbird.

Arena Boucardi Mulsant, 1877, Descr. Esp. Nouv. Trochil., p. 6. (Punta Arenas, Costa Rica.)

Habitat.—Mangrove Forest (Tropical Zone).

Distribution.—Resident on the Pacific coast of Costa Rica (Gulf of Nicoya to Golfo Dulce region).

Notes.—Also known as Boucard's Hummingbird.

Amazilia cyanocephala (Lesson). Azure-crowned Hummingbird.

Ornismya cyanocephalus Lesson, 1829, Hist. Nat. Ois.-Mouches, p. xlv. (Le Brésil, error = Veracruz, Veracruz.)

Habitat.—[cyanocephala group] Pine-Oak Forest, Pine Forest, Montane Evergreen Forest (600–1800 m); [chlorostephana group] lowland pine savanna (100 m); (Tropical and Subtropical zones).

Distribution.—Breeds [cyanocephala group] from southern Tamaulipas south, primarily in the foothills, through Veracruz, northern and southeastern Oaxaca, Chiapas, southern Quintana Roo, central and eastern Guatemala, Belize, El Salvador, and Honduras to north-central Nicaragua.

Resident [chlorostephana group] in Honduras and northeastern Nicaragua.

Winters [cyanocephala group] generally in the breeding range, occurring also in lowland habitats (recorded San Luis Potosí and Quintana Roo).

Notes.—Also known as Red-billed Azurecrown. Groups: A. cyanocephala [Azurecrowned Hummingbird] and A. chlorostephana Howell, 1965 [Mosquitia Hummingbird]. Amazilia microrhyncha (Elliot, 1876) [Small-billed Azurecrown], is now regarded as being based on an aberrant specimen of A. cyanocephala (Monroe 1968).

Amazilia cyanifrons (Bourcier). Indigo-capped Hummingbird.

Trochilus cyanifrons Bourcier, 1843, Rev. Zool. [Paris] 6: 100. (Ybagué, Nouvelle-Grenade = Ibague, Colombia.)

Habitat.—Secondary Forest, Montane Evergreen Forest Edge, Tropical Lowland Evergreen Forest Edge (400–2000 m; Tropical and Subtropical zones).

Distribution.—Resident in northern Colombia (Atlántico and the Magdalena Valley to Norte de Santander); one specimen known from northwestern Costa Rica (Volcán Miravalles).

Notes.—Also known as Blue-fronted Hummingbird. This form is known from Middle America only from the single specimen taken in Costa Rica and described as a new species, A. alfaroana Underwood, 1896. The type closely resembles A. cyanifrons and does not appear to be a hybrid between any Middle American species of Amazilia. The

unique specimen of alfaroana is tentatively considered to represent a subspecies of A. cyanifrons (Stiles and Skutch 1989); its status can be clarified only by additional data.

Amazilia beryllina (Deppe). Berylline Hummingbird.

Trochilus beryllinus "Lichtenst[ein]." W. Deppe, 1830, Preis.-Verz. Sšugeth. Všgel, etc., Mex., p. 1. (México = Temascaltepec, México.)

Habitat.—Pine-Oak Forest, Pine Forest, Tropical Deciduous Forest, Secondary Forest (0-3100 m; Tropical and Subtropical zones).

Distribution.—Resident from southeastern Arizona (Huachuca Mountains), Sonora, and southern Chihuahua south through western Mexico (east to Durango, Guanajuato, Tlaxcala, Puebla, and west-central Veracruz), Guatemala, and El Salvador to central Honduras.

Accidental in southwestern New Mexico (Guadalupe Canyon); a sight report for western Texas.

Notes.—Hybridization between A. beryllina and A. cyanura had been reported from south-central Guatemala (Patulul) and El Salvador, but verification of hybridization is lacking (Howell and Webb 1995). Amazilia sumichrasti Salvin, 1891, is based on an individual of A. beryllina taken at Santa Efigenia, Oaxaca (Friedmann et al. 1950).

Amazilia cyanura Gould. Blue-tailed Hummingbird.

Amazilia cyanura Gould, 1859, Monogr. Trochil., pt. 18, pl. [12] and text. (Realejo, Nicaragua.)

Habitat.—Secondary Forest, Tropical Deciduous Forest, Tropical Lowland Evergreen Forest Edge (0–1500 m; Tropical and lower Subtropical zones).

Distribution.—Resident on the Pacific slope from central Chiapas to western Nicaragua (also locally on the Caribbean slope of Honduras).

Casual in Costa Rica (near San José and Finca La Selva), possibly a rare and local resident. **Notes.**—Amazilia cyanura and A. saucerrottei appear to constitute a superspecies (Sibley and Monroe 1990). See comments under A. beryllina.

Amazilia saucerrottei (DeLattre and Bourcier). Steely-vented Hummingbird.

Trochilus Saucerrottei DeLattre and Bourcier, 1846, Rev. Zool. [Paris] 9: 311. (Caly, Nouvelle-Grenade = Cali, Colombia.)

Habitat.—Tropical Lowland Evergreen Forest Edge, Gallery Forest, Secondary Forest, Second-growth Scrub (0–2000 m; Tropical to Temperate zones).

Distribution.—Resident in Middle America from western and southern Nicaragua south to southern Costa Rica (primarily on the Pacific slope and in the central plateau, south to the Dota region); and in South America in Colombia and northwestern Venezuela.

Casual in Caribbean Costa Rica (Carrillo).

Notes.—Also known as Blue-vented Hummingbird. See comments under A. cyanura.

Amazilia edward (DeLattre and Bourcier). Snowy-bellied Hummingbird.

Trochilus Edward DeLattre and Bourcier, 1846, Rev. Zool. [Paris] 9: 308. (isthme de Panama.)

Habitat.—Tropical Lowland Evergreen Forest Edge, Montane Evergreen Forest Edge, Secondary Forest (0–1800 m; Tropical and Subtropical zones).

Distribution.—Resident [niveoventer group] in southwestern Costa Rica (El General-Térraba-Golfo Dulce region) and western Panama (east to western Coclé and the Azuero Peninsula, including Isla Coiba); and [edward group] in central and eastern Panama (from eastern Coclé and western Panamá east to Darién, primarily on the Pacific slope, and including the Pearl, Taboga, Taboguilla, and Uravá islands).

Notes.—Also known as Snowy-breasted Hummingbird. The two groups, A. niveoventer (Gould, 1851) [Snowy-bellied Hummingbird] and A. edward [Edward's Hummingbird], intergrade in central Panama (Wetmore 1968).

Amazilia tzacatl (De la Llave). Rufous-tailed Hummingbird.

Trochilus Tzacatl De la Llave, 1833, Registro Trimestre 2(5): 48. (México.)

Habitat.—Tropical Lowland Evergreen Forest Edge, Secondary Forest, Tropical Deciduous Forest (0–1800 m; Tropical and lower Subtropical zones).

Distribution.—Resident [tzacatl group] from southern Tamaulipas south in the Gulf-Caribbean lowlands to northern Oaxaca, Chiapas, the Yucatan Peninsula, Guatemala, Belize, Honduras, and Nicaragua, and on both slopes of Costa Rica (rare in the arid northwest) and Panama (including many islands off the Pacific coast), and in South America from Colombia (including Gorgona Island) east to northwestern Venezuela and south to western Ecuador; and [handleyi group] on Isla Escudo de Veraguas, off the Caribbean coast of western Panama.

Reports [tzacatl group] from southern Texas (Brownsville) are questionable (DeBenedictis 1992), as are those from the Pacific slope of Guatemala.

Notes.—Also known as Rieffer's Hummingbird. The two groups are regarded by Wetmore (1968) as distinct species, *A. tzacatl* [Rufous-tailed Hummingbird] and *A. handleyi* Wetmore, 1963 [Escudo Hummingbird].

Amazilia yucatanensis (Cabot). Buff-bellied Hummingbird.

Trochilus yucatanensis Cabot, 1845, Proc. Boston Soc. Nat. Hist. 2: 74. (Yucatán.)

Habitat.—Tropical Deciduous Forest, Gallery Forest, Secondary Forest, Tropical Lowland Evergreen Forest Edge (0–1250 m; Tropical Zone).

Distribution.—Resident from Coahuila, Nuevo León, and southern Texas (north to Corpus Christi) south in the Gulf-Caribbean lowlands (including the Yucatan Peninsula) to northern Guatemala (Petén) and Belize.

Winters regularly in southeastern Texas, southern Louisiana, southern Mississippi, and northwestern Florida. Casual or accidental in Arkansas, southern Alabama, and southeastern Florida.

Notes.—Also known as Fawn-breasted Hummingbird or Yucatan Hummingbird. A specimen from Honduras referred to this species (Monroe 1968) is apparently a hybrid A. rutila x A. tzacatl (Howell and Webb 1995). Mayr and Short (1970) considered A. yucatanensis and A. rutila to constitute a superspecies.

Amazilia rutila (DeLattre). Cinnamon Hummingbird.

Ornismya cinnamomea (not Ornismya cinnamomeus Gervais, 1835) Lesson, 1842, Rev. Zool. [Paris] 5: 175. (Acapulco [Guerrero].)

Ornismya rutila DeLattre, 1843, Echo Monde Savant (2)7: col. 1069. New name for Ornismya cinnamomea Lesson, preoccupied.

Habitat.—Tropical Deciduous Forest, Secondary Forest, Gallery Forest, Arid Lowland Scrub (0–1250 m; Tropical and lower Subtropical zones).

Distribution.—Resident on the Pacific slope of Middle America (including the Tres Marías Islands) from central Sinaloa south to central Costa Rica; and on the Caribbean slope on the Yucatan Peninsula (including Holbox, Contoy, Mujeres, and Cancun islands, and Cayo Culebra), in Belize (including offshore cays), in the arid interior valleys of Guatemala and Honduras, and in the Mosquitia of eastern Honduras and northeastern Nicaragua.

Accidental in southern Arizona (Patagonia; 21–23 July 1992; 1992, Amer. Birds 46: 1161; photograph in DeBenedictis 1994b) and southwestern New Mexico (Santa Teresa, Doña Ana County, 18–23 Sept. 1993; 1994, Amer. Birds 48: 138, photo p. 160).

Notes.—See comments under A. yucatanensis.

Amazilia violiceps (Gould). Violet-crowned Hummingbird.

Cyanomyia violiceps Gould, 1859, Ann. Mag. Nat. Hist. (3)4: 97. ([state of] Oaxaca, South Mexico; Binford, 1989, Ornithol. Monogr. 43, p. 338–339.)

Habitat.—Tropical Deciduous Forest, Gallery Forest, Secondary Forest; in United States,

primarily in riparian woodland of cottonwoods and sycamores with dense understory (0-2200 m; Subtropical and lower Temperate zones).

Distribution.—Resident from northern Sonora, southeastern Arizona (Huachuca and Chiricahua mountains), southwestern New Mexico (Guadalupe Canyon), and western Chihuahua south to Guerrero and (at least seasonally) northwestern Oaxaca. Northernmost populations are migratory southward.

Casual or accidental in central southern California (Sonoma, Los Angeles, and Ventura counties), central Arizona, southern New Mexico, western Texas (El Paso), and Veracruz; a sight report from Baja California.

Notes.—The name A. verticalis (W. Deppe, 1830), often used for this species, has been relegated to the synonymy of A. cyanocephala (see Phillips 1965). Amazilia violiceps and A. viridifrons are sometimes considered conspecific, but apparent sympatry in Guerrero and Oaxaca without intergradation seems to support their status as full species (Binford 1989).

Amazilia viridifrons (Elliot). Green-fronted Hummingbird.

Cyanomyia viridifrons Elliot, 1871, Ann. Mag. Nat. Hist. (4)8: 267. (Putla [de Guerrero, Oaxaca], Mexico; Binford, 1989, Ornithol. Monogr. 43, p. 339.)

Habitat.—Tropical Deciduous Forest, Arid Lowland Scrub, Arid Montane Scrub, Tropical Lowland Evergreen Forest Edge (0–1550 m; Tropical and lower Temperate zones).

Distribution.—Resident [viridifrons group] on the Pacific slope of southern Mexico from central Guerrero south to western Oaxaca, and in eastern Oaxaca and western Chiapas (east to Tonalá and Ocozocoautla); [wagneri group] in southern Oaxaca.

Notes.—Groups: A. viridifrons [Green-fronted Hummingbird] and A. wagneri Phillips, 1965 [Cinnamon-sided Hummingbird]. The form wagneri may represent a distinct species (Howell 1993, Howell and Webb 1995). See comments under A. violiceps.

Genus EUPHERUSA Gould

Eupherusa Gould, 1857, Monogr. Trochil., pt. 14, pl. [12] and text. Type, by monotypy, Ornismya eximia DeLattre.

Eupherusa eximia (DeLattre). Stripe-tailed Hummingbird.

Ornismya eximia DeLattre, 1843, Echo Monde Savant (2)7: col. 1069. (Guatemala = Cobán, Alta Verapaz, Guatemala.)

Habitat.—Tropical Lowland Evergreen Forest, Secondary Forest, Montane Evergreen Forest (800–2000 m; Tropical and Subtropical zones).

Distribution.—Resident in the highlands of Middle America from Puebla, Veracruz, northern and southeastern Oaxaca, and Chiapas south through eastern Guatemala, Belize, and Honduras to north-central Nicaragua, and in the interior highlands of Costa Rica and western Panama (east to Veraguas).

Winters to lower elevations.

Eupherusa cyanophrys Rowley and Orr. Blue-capped Hummingbird.

Eupherusa cyanophrys Rowley and Orr, 1964, Condor 66: 82. (11 miles south of [San Pedro] Juchatengo, 4700 feet, Oaxaca, México.)

Habitat.—Montane Evergreen Forest, Tropical Deciduous Forest (1200-2600 m; Subtropical Zone).

Distribution.—Resident in southern Oaxaca (Sierra de Miahuatlán).

Eupherusa poliocerca Elliot. White-tailed Hummingbird.

Eupherusa poliocerca Elliot, 1871, Ann. Mag. Nat. Hist. (4)8: 266. (Putla [de Guerrero, Oaxaca], Mexico; Binford, 1989, Ornithol. Monogr. 43, p. 339.)

Habitat.—Tropical Deciduous Forest, Montane Evergreen Forest (900–1400 m; Subtropical Zone).

Distribution.—Resident in the Sierra Madre del Sur of Guerrero and western Oaxaca. Reports of this species from Puebla (Friedmann et al. 1950) are questionable.

Eupherusa nigriventris Lawrence. Black-bellied Hummingbird.

Eupherusa nigriventris Lawrence, 1868, Proc. Acad. Nat. Sci. Philadelphia 19 (1867): 232. (Costa Rica.)

Habitat.—Montane Evergreen Forest (900–2000 m; Subtropical Zone).

Distribution.—Resident in Costa Rica (primarily central highlands) and western Panama (east to Veraguas, mostly on the Caribbean slope).

Genus ELVIRA Mulsant, Verreaux and Verreaux

Elvira Mulsant, and J. and E. Verreaux, 1866, Mém. Soc. Imp. Sci. Nat. Cherbourg 12: 176. Type, by monotypy, *Trochilus (Thaumatias) chionura* Gould.

Elvira chionura (Gould). White-tailed Emerald.

Trochilus (Thaumatias?) chionura Gould, 1851, Proc. Zool. Soc. London (1850), p. 162. (Chiriqui near David, province of Veragua, at an altitude of from 2000 to 3000 feet [Chiriquí, Panama].)

Habitat.—Montane Evergreen Forest (900-2000 m; Subtropical Zone).

Distribution.—Resident in the highlands of southwestern Costa Rica (north to the Dota Mountains) and western Panama (Chiriquí, Veraguas, and eastern Coclé).

Elvira cupreiceps (Lawrence). Coppery-headed Emerald.

Eupherusa cupreiceps Lawrence, 1866, Ann. Lyc. Nat. Hist. N. Y. 8: 348. (Barranca, Costa Rica.)

Habitat.—Montane Evergreen Forest (700–1500 m; Subtropical Zone).

Distribution.—Resident in the highlands of Costa Rica (primarily on the Caribbean slope of the Cordillera Central, and in the cordilleras de Tilarán and Guanacaste).

Genus MICROCHERA Gould

Microchera Gould, 1858, Monogr. Trochil., pt. 16, pl. [12] and text. Type, by original designation, Mellisuga albo-coronata Lawrence.

Microchera albocoronata (Lawrence). Snowcap.

Mellisuga albo-coronata Lawrence, 1855, Ann. Lyc. Nat. Hist. N. Y. 6 . . . 137, pl. 4. (Belen, Veraguas, New Grenada [= Panama].)

Habitat.—Tropical Lowland Evergreen Forest Edge, Montane Evergreen Forest Edge (300–1000 m; Tropical and lower Subtropical zones).

Distribution.—Resident on the Caribbean slope of eastern Honduras (Olancho, sight reports), Nicaragua, Costa Rica, and western Panama (Veraguas, western Colón, Coclé, and western Panamá province).

Genus CHALYBURA Reichenbach

Agyrtria & Chalybura Reichenbach, 1854, J. Ornithol. 1 (Beil. zu Extrah.): 10. Type, by subsequent designation (Elliot, 1879), Trochilus buffonii Lesson.

Chalybura buffonii (Lesson). White-vented Plumeleteer.

Trochilus Buffonii Lesson, 1832, Les Trochil., p. 31, pl. 5. (Brazil, error = Bogotá region, Colombia.)

Habitat.—Tropical Lowland Evergreen Forest, Tropical Deciduous Forest, Secondary Forest (0–900 m; Tropical Zone).

Distribution.—Resident [buffonii group] in Panama (from western Panamá province on the Pacific slope to the Canal area in the Caribbean lowlands eastward), western and northern Colombia, and western and northern Venezuela (east to Miranda and Guárico); [caeruleogaster group] in southeastern Colombia (from western Arauca to Meta); and [intermedia group] in southwestern Ecuador and northwestern Peru.

Notes.—Groups: C. buffonii [White-vented Plumeleteer], C. intermedia E. and C. Hartert, 1894 [Ecuadorian Plumeleteer], and C. caeruleogaster (Gould, 1847) [Blue-bellied Plumeleteer].

Chalybura urochrysia (Gould). Bronze-tailed Plumeleteer.

Hypuroptila urochrysia Gould, 1861, Monogr. Trochil., pt. 22, pl. [7] and text. (neighborhood of Panamá, error = western Colombia.)

Habitat.—Tropical Lowland Evergreen Forest (0-900 m; Tropical Zone).

Distribution.—Resident [melanorrhoa group] on the Caribbean slope of extreme eastern Honduras (Gracias a Dios), Nicaragua, and Costa Rica; and [urochrysia group] from Panama (locally on both slopes) and western Colombia south to northwestern Ecuador.

Notes.—The two groups have been recognized as full species, *C. melanorrhoa* Salvin, 1865 [Black-vented Plumeleteer] and *C. urochrysia* [Bronze-tailed Plumeleteer], but free interbreeding occurs in northwestern Panama (Eisenmann and Howell 1962).

Genus LAMPORNIS Swainson

Lampornis Swainson, 1827, Philos. Mag. (n.s.) 1: 442. Type, by monotypy, Lampornis amethystinus Swainson.

Lampornis viridipallens (Bourcier and Mulsant). Green-throated Mountain-gem.

Trochilus Viridi-pallens Bourcier and Mulsant, 1846, Ann. Sci. Phys. Nat. Agric. Ind. Soc. R., etc., Lyon 9: 321. (Cobán, Alta Verapaz, Guatemala.)

Habitat.—Montane Evergreen Forest, Pine-Oak Forest (1200–3100 m; Subtropical and lower Temperate zones).

Distribution.—Resident in the highlands of extreme southeastern Oaxaca (Sierra Madre de Chiapas), Chiapas, Guatemala, El Salvador, and western Honduras (west of the Comayagua-Ulúa river valley).

Notes.—Lampornis viridipallens and L. sybillae constitute a superspecies (Monroe 1963a, Sibley and Monroe 1990).

Lampornis sybillae (Salvin and Godman). Green-breasted Mountain-gem.

Delattria sybillæ Salvin and Godman, 1892, Ibis, p. 327. (Matagalpa, Nicaragua.)

Habitat.—Montane Evergreen Forest, Pine-Oak Forest (100–2400 m; Subtropical and lower Temperate zones).

Distribution.—Resident in the highlands of eastern Honduras (east of the Comayagua-Ulúa river valley) and north-central Nicaragua.

Notes.—For treatment of *L. sybillae* as a separate species from *L. viridipallens*, see Monroe (1963a). See comments under *L. viridipallens*.

Lampornis amethystinus Swainson. Amethyst-throated Hummingbird.

Lampornis amethystinus Swainson, 1827, Philos. Mag. (n.s.) 1: 442. (Temiscaltipec [= Temascaltepec] and Real del Monte, [México,] Mexico.)

Habitat.—Pine-Oak Forest, Montane Evergreen Forest (900–3400 m; Subtropical and lower Temperate zones).

Distribution.—Resident from southern Nayarit, Jalisco, southeastern San Luis Potosí, and southern Tamaulipas south through the highlands of southern Mexico, Guatemala, and El Salvador to central Honduras.

Notes.—Populations irregularly distributed from Michoacán to Oaxaca consisting of bluish-throated rather than pink-throated males may represent a species, *L. margaritae* (Salvin and Godman, 1889) [Margaret's Hummingbird], distinct from *L. amethystinus* (Binford 1989).

Lampornis clemenciae (Lesson). Blue-throated Hummingbird.

Ornismya Clemenciae Lesson, 1829, Hist. Nat. Ois.-Mouches, p. xlv; 1830, p. 216, pl. 80. (le Mexique = Mexico.)

Habitat.—Pine-Oak Forest, Pine Forest, Montane Evergreen Forest Edge, in migration also visiting flowers in open situations and gardens; in United States, breeds primarily in moist, wooded canyons (1500–3400 m; Subtropical and lower Temperate zones).

Distribution.—*Breeds* from northern Sonora, southeastern Arizona, Chihuahua, and western Texas south through Coahuila, Durango, and western Mexico to Oaxaca and (possibly) Chiapas. Recorded (mostly in summer) in southwestern and central Colorado.

Winters from southern Sonora (casually southeastern Arizona) and Chihuahua south through the breeding range in Mexico.

Migrates casually east to New Mexico and southern Texas (Rockport and Corpus Christi area southward).

Accidental in south-central California (a female mated to either *Calypte anna* or *Archilochus alexandri* raised young in 1977 and 1978 at Three Rivers, Tulare County; Baldridge et al. 1983) and Louisiana (Baton Rouge, Slidell).

Lampornis hemileucus (Salvin). White-bellied Mountain-gem.

Oreopyra hemileuca Salvin, 1865, Proc. Zool. Soc. London (1864), p. 584. (Turrialba and Tucurruquí, Costa Rica.)

Habitat.—Montane Evergreen Forest (700-1400 m; Subtropical Zone).

Distribution.—Resident in Costa Rica (in the Tilarán, Central, and Talamanca cordilleras) and western Panama (recorded Chiriquí and Veraguas).

Lampornis calolaema (Salvin). Purple-throated Mountain-gem.

Oreopyra calolæma Salvin, 1865, Proc. Zool. Soc. London (1864), p. 584. (Volcán de Cartago = Volcán de Irazú, Costa Rica.)

Habitat.—Montane Evergreen Forest, Secondary Forest (800-3200 m; Subtropical and lower Temperate zones).

Distribution.—Resident in the highlands of western Nicaragua (Volcán Mombacho and Volcán Maderas, Isla de Ometepe in Lago de Nicaragua) and western and central Costa Rica (from the Cordillera de Guanacaste south to the Dota region and the northern tip of the Cordillera de Talamanca); also in west-central Panama (Chiriquí west to the Fortuna area, Veraguas, and western Coclé).

Notes.—Relationships within the *L. calolaema-castaneoventris* complex are not well understood. It has been suggested by some authors (e.g., Ridgely and Gwynne 1989) that the purple-throated males (calolaema) and white-throated males (castaneoventris) are morphs of the same species; some introgression occurs in areas where both types are found, although they tend to maintain their distinctness (Stiles and Skutch 1989). Until the matter is resolved, it seems best to treat the forms as separate species with limited hybridization in the areas of sympatry. If the entire complex is regarded as a single species, as advocated by Wetmore (1968), the name Variable Mountain-gem may be used. See comments under *L. castaneoventris*.

Lampornis castaneoventris (Gould). White-throated Mountain-gem.

Trochilus (———?) castaneoventris Gould, 1851, Proc. Zool. Soc. London (1850), p. 163. (Cordillera of Chiriqui, at an altitude of 6000 feet [Panama].)

Habitat.—[cinereicauda group] Montane Evergreen Forest, Secondary Forest (1800-

3100 m; Subtropical and lower Temperate zones); [castaneoventris group] Montane Evergreen Forest, Secondary Forest (1250–3150 m; Subtropical and lower Temperate zones).

Distribution.—Resident [cinereicauda group] in the highlands of southern Costa Rica (north to the Cordillera de Talamanca); and [castaneoventris group] western Panama (Volcán de Chiriquí region of western Chiriquí east to Boquete).

Notes.—The two groups are sometimes regarded as distinct species, *L. castaneoventris* [White-throated Mountain-gem] and *L. cinereicauda* (Lawrence, 1867) [Gray-tailed Mountain-gem], but see Ridgely (1981); Stiles and Skutch (1989) treated these two and *L. calolaema* as allospecies. See comments under *L. calolaema*.

Genus LAMPROLAIMA Reichenbach

Heliodoxa δ Lamprolaima Reichenbach, 1854, J. Ornithol. 1 (Beil. zu Extrah.): 9. Type, by subsequent designation (G. R. Gray, 1855), Ornismya rhami Lesson.

Lamprolaima rhami (Lesson). Garnet-throated Hummingbird.

Ornismya Rhami Lesson, 1839, Rev. Zool. [Paris] 1: 315. (Mexico.)

Habitat.—Montane Evergreen Forest, Pine-Oak Forest (110–3100 m; Subtropical and lower Temperate zones).

Distribution.—Resident from Guerrero and western Veracruz south through Oaxaca, Chiapas, Guatemala, and El Salvador to Honduras.

Genus HELIODOXA Gould

Heliodoxa Gould, 1850, Proc. Zool. Soc. London (1849), p. 95. Type, by subsequent designation (Bonaparte, 1850), Trochilus leadbeateri Bourcier.

Heliodoxa jacula Gould. Green-crowned Brilliant.

Heliodoxa jacula Gould, 1850, Proc. Zool. Soc. London (1849), p. 96. (Santa Fé de Bogota [Colombia].)

Habitat.—Montane Evergreen Forest, Tropical Lowland Evergreen Forest (500–2150 m; Subtropical Zone).

Distribution.—Resident from Costa Rica (north to the Cordillera Central, primarily on Caribbean slope) south locally through Panama and northern Colombia to western Ecuador.

Genus EUGENES Gould

Eugenes Gould, 1856, Monogr. Trochil., pt. 12, pl. [7] and text. Type, by monotypy, Trochilus fulgens Swainson.

Eugenes fulgens (Swainson). Magnificent Hummingbird.

Trochilus fulgens Swainson, 1827, Philos. Mag. (n.s.) 1: 441. (Temiscaltipec, Mexico = Temascaltepec, México.)

Habitat.—Pine-Oak Forest, Pine Forest, Montane Evergreen Forest (1300–3300 m; Subtropical and Temperate zones).

Distribution.—Breeds [fulgens group] in north-central Colorado (once), and from south-eastern Arizona, southwestern (and probably also north-central) New Mexico, and western Texas (Culberson, Jeff Davis, and Brewster counties) south through the highlands of Mexico, Guatemala, western El Salvador, and Honduras to north-central Nicaragua; recorded in summer (and probably breeding) elsewhere in southwestern and central Colorado.

Winters [fulgens group] from Sonora and Chihuahua south through the breeding range in Middle America, casually in southern Arizona and southern New Mexico.

Resident [spectabilis group] in the mountains from central Costa Rica to western Panama (western Chiriquí).

Casual [fulgens group] north to southern Utah, northern New Mexico, northeastern Kansas, and south-central Texas; sight reports from Wyoming and eastern Texas. Accidental in Minnesota, Georgia, and Florida.

Notes.—Also known as Rivoli's Hummingbird. Groups: *E. fulgens* [Magnificent or Rivoli's Hummingbird] and *E. spectabilis* (Lawrence, 1867) [Admirable Hummingbird].

Genus HAPLOPHAEDIA Simon

Haplophædia Simon, 1918, Not. Travaux Sci., p. 39. Type, by monotypy, Trochilus aureliae Bourcier and Mulsant.

Haplophaedia aureliae (Bourcier and Mulsant). Greenish Puffleg.

Trochilus Aureliæ Bourcier and Mulsant, 1846, Ann. Sci. Phys. Nat. Agric. Ind. Soc. R., etc., Lyon 9: 315, pl. 10. (Bogotá, Colombia.)

Habitat.—Montane Evergreen Forest, Secondary Forest (1400–2500 m; upper Tropical and Subtropical zones).

Distribution.—Resident in eastern Panama (in eastern Darién on cerros Pirre, Malí, and Tacarcuna); and in the Andes of South America from Colombia south to northern Bolivia.

Genus HELIOTHRYX Boie

Heliothryx Boie, 1831, Isis von Oken, col. 547. Type, by subsequent designation (G. R. Gray, 1840), H. aurita (L.) = Trochilus auritus Gmelin.

Heliothryx barroti (Bourcier). Purple-crowned Fairy.

Trochilus Barroti Bourcier, 1843, Rev. Zool. [Paris] 6: 72. (Carthagène = Cartagena, Colombia.)

Habitat.—Tropical Lowland Evergreen Forest, Secondary Forest (0–1300 m; Tropical and lower Subtropical zones).

Distribution.—Resident on the Gulf-Caribbean slope from Tabasco and northern Chiapas south through eastern Guatemala, Belize, and Honduras to Nicaragua, on both slopes of Costa Rica (except the arid northwest) and Panama, and from northern Colombia south, west of the Andes, to southwestern Ecuador.

Notes.—Heliothryx barroti and H. aurita (Gmelin, 1788), of South America, constitute a superspecies (Sibley and Monroe 1990).

Genus *HELIOMASTER* Bonaparte

Heliomaster Bonaparte, March 1850, Consp. Gen. Avium 1(1): 70. Type, by subsequent designation (Bonaparte, April 1850), Orn. angel. = Ornismya angelae Lesson = Trochilus furcifer Shaw.

Heliomaster longirostris (Audebert and Vieillot). Long-billed Starthroat.

Trochilus longirostris Audebert and Vieillot, 1801, Ois. Dorés 1: 107, pl. 59. (West Indies = Trinidad.)

Habitat.—Tropical Lowland Evergreen Forest Edge, Tropical Deciduous Forest, Gallery Forest, Secondary Forest (0–1500 m; Tropical and Subtropical zones).

Distribution.—Resident on both slopes of Middle America from Guerrero and Veracruz south (exclusive of the Yucatan Peninsula) through Middle America (rare on Pacific slope from Honduras to northwestern Costa Rica), and in South America from Colombia, Venezuela, Trinidad, and the Guianas south, west of the Andes to northwestern Peru and east of the Andes to central Bolivia and central Brazil.

Heliomaster constantii (DeLattre). Plain-capped Starthroat.

Ornismya Constantii DeLattre, 1843, Echo Monde Savant (2)7: col. 1069, in text. (Guatemala.)

Habitat.—Tropical Deciduous Forest, Gallery Forest, Arid Lowland Scrub (0-1250 m; Tropical Zone).

Distribution.—Resident on the Pacific slope of Middle America from southern Sonora south to Costa Rica (primarily the Guanacaste region in the northwest, rarely in the El General-Térraba region in the southwest).

Casual in southeastern Arizona (north to Phoenix); a sight report for southwestern New Mexico.

Notes.—Also known as Constant's Starthroat.

Genus CALLIPHLOX Boie

Calliphlox Boie, 1831, Isis von Oken, col. 544. Type, by subsequent designation (G. R. Gray, 1855), Trochilus amethystinus Gm. = Boddaert.

Philodice Mulsant, and J. and E. Verreaux, 1866, Mém. Soc. Imp. Sci. Nat. Cherbourg 12: 230. Type, by monotypy, *Trochilus mitchellii* Bourcier.

Calliphlox evelynae (Bourcier). Bahama Woodstar.

Trochilus Evelynæ Bourcier, 1847, Proc. Zool. Soc. London, p. 44. (Nassau, New Providence [Bahamas].)

Habitat.—Secondary Forest, Second-growth Scrub, Tropical Lowland Evergreen Forest Edge.

Distribution.—Resident throughout the Bahama Islands.

Casual in southern Florida (Lantana, Homestead, Miami area).

Notes.—Often treated in the genus Philodice.

Calliphlox bryantae (Lawrence). Magenta-throated Woodstar.

Doricha bryantæ Lawrence, 1867, Ann. Lyc. Nat. Hist. N. Y. 8: 483. (Costa Rica.)

Habitat.—Montane Evergreen Forest Edge, Secondary Forest, Second-growth Scrub (700-1900 m; Subtropical and lower Temperate zones).

Distribution.—Resident in the highlands of Costa Rica (from the Cordillera de Guanacaste to the central plateau near San José, the Dota Mountains, and Cerro de Talamanca), and western Panama (Chiriquí and Veraguas).

Notes.—Also known as Costa Rican Woodstar. Frequently placed in the genus Philodice.

Calliphlox mitchellii (Bourcier). Purple-throated Woodstar.

Trochilus Mitchellii Bourcier, 1847, Proc. Zool. Soc. London, p. 47. (Zimapán [, Colombia].)

Habitat.—Montane Evergreen Forest, Second-growth Scrub (1000–1900 m; Subtropical and lower Temperate zones).

Distribution.—Resident in western Colombia and western Ecuador.

Presumably resident in eastern Panama (Cana region, Cerro Pirre, eastern Darién), where known from two female specimens: 13 April 1938 (Wetmore 1968; reported as *Acestrura heliodor*) and 11 August 1982 (Robbins et al. 1985).

Notes.—For a full discussion of these two specimens, see Robbins et al. (1985). This species is sometimes placed in the genus *Philodice* (e.g., Hilty and Brown 1986).

Genus DORICHA Reichenbach

Calliphlox & Doricha Reichenbach, 1854, J. Ornithol. 1 (Beil. zu Extrah.): 12. Type, by monotypy, Trochilus enicurus Vieillot.

Notes.—Merged with Calothorax by Howell and Webb (1995).

Doricha enicura (Vieillot). Slender Sheartail.

Trochilus enicurus Vieillot, 1818, Nouv. Dict. Hist. Nat. (nouv. éd.) 23: 429. (Brazil, error = Guatemala.)

Habitat.—Montane Evergreen Forest Edge, Second-growth Scrub (1000-2100 m; Subtropical Zone).

Distribution.—Resident in the highlands of Chiapas, Guatemala, El Salvador, and western Honduras (east to La Paz).

Doricha eliza (DeLattre and Lesson). Mexican Sheartail.

Trochilus Eliza DeLattre and Lesson, in Lesson and DeLattre, 1839, Rev. Zool. [Paris] 2: 20. (Pas du Taureau, entra la Vera Cruz et Jalapa = Paso del Toro, Veracruz.)

Habitat.—Arid Lowland Scrub (Tropical Zone).

Distribution.—Resident in two disjunct areas of southeastern Mexico (in central Veracruz, and the coastal scrub of the Yucatan Peninsula, including Holbox Island; a sight record for Isla Cancun).

Genus TILMATURA Reichenbach

Tilmatura Reichenbach, 1855, Trochil. Enum., p. 5. Type, by monotypy, Trochilus lepidus Reichenbach = Ornismya dupontii Lesson.

Tilmatura dupontii (Lesson). Sparkling-tailed Hummingbird.

Ornismya dupontii Lesson, 1832, Hist. Nat. Colibris, livr. 13, p. 100, pl. 1. (México.)

Habitat.—Pine-Oak Forest, Montane Evergreen Forest Edge, Second-growth Scrub (900–2500 m; Subtropical and lower Temperate zones).

Distribution.—Resident in the highlands from Sinaloa, Jalisco, Colima, Michoacán, México, Morelos, and western Veracruz south through Guerrero, Oaxaca, Chiapas, Guatemala, El Salvador, and Honduras to north-central Nicaragua.

Notes.—Placed in the genus Philodice by Howell and Webb (1995).

Genus CALOTHORAX Gray

Calothorax G. R. Gray, 1840, List Genera Birds, p. 13. Type, by original designation,C. cyanopogon (Lesson) = Cynanthus lucifer Swainson.

Calothorax lucifer (Swainson). Lucifer Hummingbird.

Cynanthus Lucifer Swainson, 1827, Philos. Mag. (n.s.) 1: 442. (Temiscaltipec, Mexico = Temascaltepec, México.)

Habitat.—Arid Montane Scrub; in United States, primarily on steep desert slopes with agave, sotol, and ocotillo adjacent to brushy washes with nectar-producing plants such as havard penstemon, and woolly paintbrush (1550–2750 m; upper Tropical and Subtropical zones).

Distribution.—Breeds from southern Arizona (Cochise County), southwestern New Mexico (Peloncillo Mountains), western Texas (Brewster County), and Nuevo León south in the highlands of Mexico to Valley of México, possibly to Morelos and Puebla.

Winters from northern Mexico south to the limits of the breeding range, casually to western Veracruz, Oaxaca, and (questionably) Chiapas.

Casual elsewhere in southern Arizona and southern New Mexico, and in southern Texas (east to Hays, Bee, and Aransas counties).

Notes.—Calothorax lucifer and C. pulcher appear to constitute a superspecies (Sibley and Monroe 1990).

Calothorax pulcher Gould. Beautiful Hummingbird.

Calothorax pulcher Gould, 1859, Ann. Mag. Nat. Hist. (3)4: 97. ([state of] Oaxaca, in Western Mexico; Binford, 1989, Ornithol. Monogr. 43, p. 339.)

Habitat.—Arid Montane Scrub (1000–2250 m; Subtropical and lower Temperate zones).

Distribution.—Resident from eastern Guerrero and southern Puebla south to central Oaxaca (west of the Isthmus of Tehuantepec); reports from Chiapas are questionable.

Notes.—See comments under C. lucifer.

Genus ARCHILOCHUS Reichenbach

Selasphorus & Archilochus Reichenbach, 1854, J. Ornithol. 1 (Beil. zu Extrah.): 13. Type, by monotypy, Trochilus alexandri Bourcier [= Bourcier and Mulsant].

Notes.—See comments under Calypte and Stellula.

Archilochus colubris (Linnaeus). Ruby-throated Hummingbird.

Trochilus Colubris Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 120. Based mainly on "The Hummingbird" Catesby, Nat. Hist. Carolina 1: 65, pl. 65. (in America, imprimis septentrionali = South Carolina.)

Habitat.—Deciduous or mixed woodland, second growth, parks, and open situations with scattered trees, foraging also in meadows and gardens; in migration and winter, a wide variety of woodland and open habitats.

Distribution.—*Breeds* from central Alberta, central Saskatchewan, southern Manitoba, central Ontario, southern Quebec, New Brunswick, Prince Edward Island, Nova Scotia, and Newfoundland south, east of the Rocky Mountains, to southern Texas, the Gulf coast, and southern Florida, and west to the eastern Dakotas, central Nebraska, central Kansas, central Oklahoma, and central Texas.

Winters from on Pacific slope of Mexico from southern Sinaloa south, and in interior and Caribbean slope from southern Veracruz, the Yucatan Peninsula, and Oaxaca, south through Middle America (including Cozumel and Holbox islands) to central Costa Rica (south of Nicaragua most commonly on the Pacific slope), casually to western Panama (Chiriquí and western Panamá province); also small numbers from southeastern Texas and southern Louisiana along Gulf Coast to northwestern Florida, and also in southern Florida; casual in western Cuba.

Migrates through southern Texas and northeastern and north-central Mexico; regular in Cuba, especially in spring.

Casual north to southwestern British Columbia, northern Manitoba, northern Ontario, Labrador, and Newfoundland, and in California (east-central and the Farallon Islands), eastern New Mexico, the northern Bahamas (Grand Bahama, New Providence), and Bermuda; sight reports from southeastern Colorado and southern Baja California. Reports from Grand Cayman, Jamaica, Hispaniola, and Puerto Rico are questionable. Accidental in Alaska (St. Michael).

Notes.—Although the breeding ranges of *A. colubris* and *A. alexandri* overlap slightly in central Texas, it seems best to regard these species as constituting a superspecies (Mayr and Short 1970).

Archilochus alexandri (Bourcier and Mulsant). Black-chinned Hummingbird.

Trochilus Alexandri Bourcier and Mulsant, 1846, Ann. Sci. Phys. Nat. Agric. Ind. Soc. R., etc., Lyon 9: 330. (Sierra Madre [Occidental], Mexico.)

Habitat.—Open woodland, scrub, desert washes, riparian woodland, chaparral, parks, and gardens, most frequently in arid regions.

Distribution.—Breeds from south-central British Columbia, Washington, central Idaho, and northwestern Montana south to northern Baja California, northern Sonora, northern Chihuahua, northern Coahuila (probably), and southern Texas, and east to southwestern Wyoming, southeastern Colorado, southwestern Oklahoma, and central Texas (to Dallas, Navarro, and Hidalgo counties).

Winters from primarily along Pacific slope from southern Sonora (casually southern California) south to Michoacán and Morelos, and also small numbers in southeastern Texas east along the Gulf coast to northwestern Florida; casually also in Georgia and South Carolina.

Migrates through much of northern Mexico south of the breeding range from eastern Baja California and Sonora to western Tamaulipas, south to limit of winter range.

Casual in south-coastal British Columbia, southern Alberta, Wyoming, Kansas, Arkansas, North Carolina, and southern Florida, also in southern Baja California and Veracruz. Accidental in southern Ontario, Massachusetts, and Tennessee; sight reports for southern Saskatchewan and Nova Scotia.

Notes.—See comments under A. colubris.

Genus MELLISUGA Brisson

Mellisuga Brisson, 1760, Ornithologie 1: 40; 3: 694. Type, by tautonymy, Mellisuga Brisson = Trochilus minimus Linnaeus.

Mellisuga minima (Linnaeus). Vervain Hummingbird.

Trochilus minimus Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 121. Based on "The Least Humming-bird" Edwards, Nat. Hist. Birds 2: 105, pl. 105. (in America = Jamaica.)

Habitat.—Second-growth Scrub, Tropical Lowland Evergreen Forest Edge (0–2400 m). **Distribution**.—Resident on Jamaica and Hispaniola (including Gonâve, Tortue, Saona, and Catalina islands, and Île-à-Vache).

A sight report in Puerto Rico.

Mellisuga helenae (Lembeye). Bee Hummingbird.

Orthorhynchus helenæ (Gundlach MS) Lembeye, 1850, Aves Isla Cuba, p. 70, pl. 10, fig. 2. (Cárdenas, Cuba.)

Habitat.—Second-growth Scrub, Montane Evergreen Forest Edge, Pine Forest Edge, Tropical Lowland Evergreen Forest Edge, Secondary Forest (0–1200 m).

Distribution.—Resident on Cuba and the Isle of Pines.

Genus CALYPTE Gould

Calypte Gould, 1856, Monogr. Trochil., pt. 11, pl. [5-7] and text. Type, by subsequent designation (Baird, Brewer, and Ridgway, 1875), Ornismya costae Bourcier.

Notes.—Merged with Archilochus by Howell and Webb (1995).

Calypte anna (Lesson). Anna's Hummingbird.

Ornismya Anna Lesson, 1829, Hist. Nat. Ois.-Mouches, p. "xxxj" [= xxxi]; 1830, p. 205, pl. 74. (La Californie = San Francisco, California.)

Habitat.—Open woodland, chaparral, scrubby areas, and partly open situations, foraging also in gardens and meadows; ascends to montane regions in summer postbreeding season.

Distribution.—*Breeds* in southwestern British Columbia (including Vancouver Island), western Washington, western Oregon, California (west of the Sierra Nevada from Humboldt, Shasta, and Tehama counties southward), northwestern Baja California, and southern Arizona (north to Phoenix and Superior). Recorded in summer (and probably breeding) in southern New Mexico and western Texas (Davis Mountains).

Winters from central British Columbia south to central Baja California, and east to Utah (casually), southern Arizona, central New Mexico, northern Sonora, and northern Chihuahua, casually north to south-coastal Alaska, central British Columbia, and western Montana, and east to central New Mexico, northern Coahuila, and east-central and southeastern Texas, southern Louisiana, southern Mississippi, and southern Alabama.

Casual or accidental in southern Alberta, Saskatchewan, Minnesota, Wisconsin, Montana, Wyoming, Colorado, Kansas, Oklahoma, Missouri, Arkansas, Tennessee, Florida (Tallahassee), and Georgia.

Calypte costae (Bourcier). Costa's Hummingbird.

Ornismya Costae Bourcier, 1839, Rev. Zool. [Paris] 2: 294. (la Californie = Magdalena Bay, Baja California.)

Habitat.—Desert and semi-desert, especially in washes, and arid brushy foothills and chaparral; in migration and winter, also adjacent mountains and in open meadows and gardens.

Distribution.—Breeds from central California (north to Monterey, Stanislaus, and Inyo counties), southern Nevada, and southwestern Utah south to southern Baja California (including the Channel Islands off California, and islands off the coast of Baja California), Sonora (including Tiburón and San Esteban islands), southern Arizona, and (probably) southwestern New Mexico; there is an isolated breeding attempt (eggs laid, nest destroyed) for southern Oregon.

Winters from southern California and southern Arizona south to Sinaloa and Nayarit, casually north to southwestern British Columbia, Oregon, and central Nevada, and east to central and southern Texas (Hays and Kleberg counties).

Accidental in south-coastal Alaska (Anchorage); a sight report for southern Alberta.

Genus STELLULA Gould

Stellula Gould, 1861, Introd. Trochil., p. 90. Type, by monotypy, Trochilus calliope Gould.

Notes.—Merged with Archilochus by Howell and Webb (1995).

Stellula calliope (Gould). Calliope Hummingbird.

Trochilus (Calothorax) Calliope Gould, 1847, Proc. Zool. Soc. London, p. 11. (Mexico = Real del Monte, Hidalgo.)

Habitat.—Open shrubby montane forest, mountain meadows, second-growth, and willow and alder thickets; in migration and winter, also chaparral, lowland brushy areas, deserts, and semi-desert regions.

Distribution.—Breeds in the mountains from central interior British Columbia (also Vancouver Island) and west-central Alberta south through Washington, Oregon, Nevada, and California to northern Baja California (Sierra San Pedro Mártir), and east to western Montana, western Wyoming, and Utah.

Winters from southern Sinaloa south to Michoacán, Guerrero, and Oaxaca, and east to Aguascalientes, Guanajuato, and Distrito Federal; casual, but increasingly regular, along Gulf Coast in southeastern Texas, southern Louisiana, southern Mississippi, southern Alabama, and northwestern Florida; one December record from western Texas (El Paso).

Migrates regularly through the southwestern United States, northern Baja California, and northwestern Mexico, and casually east to southwestern Saskatchewan, South Dakota, western Nebraska, Kansas, and western Texas.

Casual north to northeastern British Columbia. Accidental in Minnesota, Kansas, and North Carolina. Sight reports for southeastern Alaska and western Oklahoma.

Genus ATTHIS Reichenbach

Trochilus & Atthis Reichenbach, 1854, J. Ornithol. 1 (Beil. zu Extrah.): 12. Type, by subsequent designation (G. R. Gray, 1855), Ornismya heloisa Lesson and DeLattre.

Notes.—Merged with Selasphorus by Howell and Webb (1995).

Atthis heloisa (DeLattre and Lesson). Bumblebee Hummingbird.

Ornysmia Heloisa DeLattre and Lesson, in Lesson and DeLattre, 1839, Rev. Zool. [Paris] 2: 15. (Jalapa et Quatepu = Coátepec, Veracruz.)

Habitat.—Pine-Oak Forest, Montane Evergreen Forest Edge (1025–3800 m; Subtropical and lower Temperate zones).

Distribution.—Resident in the highlands from southwestern Chihuahua, southeastern Sinaloa, Nayarit, Jalisco, Guanajuato, San Luis Potosí, Nuevo León, and southern Tamaulipas south to Oaxaca (west of the Isthmus of Tehuantepec) and western Veracruz.

Accidental in Arizona (Huachuca Mountains).

Notes.—Also known as Heloise's Hummingbird. Atthis heloisa and A. ellioti constitute a superspecies (Sibley and Monroe 1990).

Atthis ellioti Ridgway. Wine-throated Hummingbird.

Atthis ellioti Ridgway, 1878, Proc. U. S. Natl. Mus. 1: 8, 9, and fig. (Volcán de Fuego, Guatemala.)

Habitat.—Pine-Oak Forest, Montane Evergreen Forest Edge, Second-growth Scrub (900–2650 m; Subtropical and Temperate zones).

Distribution.—Resident in the highlands of Chiapas, Guatemala, El Salvador, and Honduras.

Notes.—See comments under A. heloisa.

Genus SELASPHORUS Swainson

Selasphorus Swainson, 1832, in Swainson and Richardson, Fauna Bor.-Amer. 2 (1831): 324, 496. Type, by subsequent designation (G. R. Gray, 1840), *Trochilus rufus* Gmelin.

Platurornis Oberholser, 1974, Bird Life Texas, p. 986. Type, by original designation, Selasphorus platycercus = Trochilus platycercus Swainson.

Notes.—See comments under Atthis.

Selasphorus platycercus (Swainson). Broad-tailed Hummingbird.

Trochilus platycercus Swainson, 1827, Philos. Mag. (n.s.) 1: 441. (No locality given = Mexico.)

Habitat.—Open woodland, especially pine, pine-oak, and pinyon-juniper, brushy hillsides, montane scrub, and thickets; in migration and winter also open situations in lowlands where flowering shrubs are present (Subtropical and Temperate zones).

Distribution.—Breeds in the mountains from north-central Idaho (Latah County), south-western Montana, and northern Wyoming south to southeastern California, northeastern Sonora, Guanajuato, México, Distrito Federal, Hidalgo, Nuevo León, and western Texas (east to Bandera County); and in eastern Chiapas and Guatemala (rare in eastern mountains).

Winters from the highlands of northern Mexico south to western Veracruz and Oaxaca (west of the Isthmus of Tehuantepec), in the breeding range in Chiapas and Guatemala, and rarely but regularly to coastal Texas and southern Louisiana, casually to southern Mississippi, southern Alabama, Georgia, and also southern Arizona.

Migrates casually east to Nebraska, central Kansas, and eastern and southeastern Texas, and west to Oregon and coastal California.

Casual, primarily in summer, north to Oregon and Montana, and in fall in Kansas and Arkansas; sight reports for British Columbia and western Florida.

Selasphorus rufus (Gmelin). Rufous Hummingbird.

Trochilus rufus Gmelin, 1788, Syst. Nat. 1(1): 497. Based mainly on the "Ruffed Honeysucker" Pennant, Arct. Zool. 2: 290. (in sinu Americae Natka = Nootka Sound, Vancouver Island, British Columbia.)

Habitat.—Coniferous forest edge, second growth, thickets, and brushy hillsides, foraging in adjacent scrubby areas and meadows; in winter, primarily pine-oak woodland; in migration, primarily lowlands in spring but montane meadows in fall.

Distribution.—Breeds from southern Alaska (west to Prince William Sound), southern Yukon, western and southern British Columbia (including the Queen Charlotte Islands), west-central Alberta, and western Montana south, primarily in the mountains, to northwestern California (Humboldt County), eastern Oregon, central Idaho, and western Wyoming.

Winters primarily from Sinaloa and Chihuahua south to Oaxaca, México, Distrito Federal, and western Veracruz. Also over much of the Gulf Coast region from central and eastern Texas to northwestern Florida, casually northward (usually unsuccessfully) through much of the eastern United States. Also casually to rarely in British Columbia and coastal southern California.

Migrates regularly through the southwestern United States, Baja California, and northern and central Mexico, casually east to eastern Alberta, Saskatchewan, Manitoba, South Dakota, Nebraska, Kansas, Missouri, and Oklahoma. Casual east across interior eastern North America (recorded from Minnesota, Wisconsin, Michigan, southern Ontario, and northern New York south to Missouri, Kentucky, and Tennessee), and along the Atlantic coast (north to Nova Scotia), some attempting to winter. Accidental on Big Diomede Island and Grand Bahama. Some of these eastern records may pertain to S. sasin.

Notes.—Selasphorus rufus and S. sasin constitute a superspecies (Mayr and Short 1970).

Selasphorus sasin (Lesson). Allen's Hummingbird.

Ornismya Sasin Lesson, 1829, Hist. Nat. Ois.-Mouches, p. xxx; 1830, p. 190, pl. 66, 67. (La Californie, la côte N.-O. d'Amérique = San Francisco, California.)

Habitat.—Chaparral, open oak woodland, riparian woodland, residential areas; in winter, montane woodland.

Distribution.—Breeds from southwestern Oregon south through coastal California to Ventura County.

Winters mostly in central Mexico south to Distrito Federal, perhaps north to Aguascalientes and Guanajuato, also casually along Gulf Coast in southeastern Texas, southern Louisiana, Mississippi, Alabama, and Georgia.

Migrates through southern California and northern Baja California (including Los Coronados and Cedros islands), most of northwestern and north-central Mexico, and east, at least casually, to southern Arizona and southern New Mexico.

Resident in the Channel Islands (off southern California), and in coastal southern California (Los Angeles County, probably also Orange County).

Accidental in Washington (Seattle), eastern Kansas, Massachusetts (Nantucket), and southwestern Texas; reports from Florida do not eliminate S. rufus.

Notes.—See comments under S. rufus.

Selasphorus flammula Salvin. Volcano Hummingbird.

Selasphorus flammula Salvin, 1865, Proc. Zool. Soc. London (1864), p. 586. (Volcán de Cartago [= Irazú], Costa Rica.)

Habitat.—Paramo Grassland, Second-growth Scrub, Montane Evergreen Forest Edge, Secondary Forest (1850–2400 m; upper Subtropical and Temperate zones).

Distribution.—Resident in the highlands of Costa Rica (Cordillera Central south along the Cordillera de Talamanca) and western Panama (Volcán Barú in western Chiriquí).

Notes.—There has been much confusion regarding the status and distribution of the forms of this species. As presently understood (Stiles 1983a), the mauve-gorgeted race flammula breeds on the Irazú-Turrialba massifs in central Costa Rica; S. torridus Salvin, 1870 [Heliotrope-throated Hummingbird], based on dull-gorgeted males, breeds the length of the Cordillera de Talamanca and is now considered a subspecies of flammula (formerly it was considered but a color morph). The red-gorgeted form S. simoni Carriker, 1910 [Cerise-throated Hummingbird], breeds on Volcán Poás and Volcán Barba of the northern Cordillera Central and (formerly?) the Cerros de Escazú south of San José; simoni is divergent in morphology (but not in displays) and was previously considered a species related to S. ardens, but it appears to be but a distinct subspecies of flammula (Stiles 1983a). If any of the preceding are regarded as specifically distinct, then Rose-throated Hummingbird would be the appropriate English name for S. flammula. See comments under S. ardens.