Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

United States Department of Agriculture
Bureau of Biological Survey

Wildlife Research and Management Leaflet BS-42

Washington, D. C.

*

April 1936

FRUITS ATTRACTIVE TO BIRDS - ROCKY MOUNTAIN STATES
REGION No. 2

[Montana, Wyoming, and Colorado]

By W. L. McATEE, Principal Biologist and Technical Adviser
Office of the Chief

Contents

Regions for which leaflets on fruits attractive to birds are available . .	2
Introduction	3
Table 1.--Groups of fleshy fruits most attractive to birds throughout the United States	4
Table 2.--Generally distributed native fruits of Montana, Wyoming, and Colorado for which satisfactory data on fruiting seasons are available	8
Table 3.--Native fruits of Montana for which less satisfactory data on fruiting seasons are available	9
Table 4.--Native fruits of Wyoming for which less satisfactory data on fruiting seasons are available	9
Table 5.--Native fruits of Colorado for which less satisfactory data on fruiting seasons are available	10
Table 6.--Extralimital fruits that have been recommended for Montana . . .	10
Table 7.--Extralimital fruits that have been recommended for Wyoming . . .	11
Table 8.--Extralimital fruits that have been recommended for Colorado . . .	11
Literature	12

REGIONS FOR WHICH LEAFLETS ON FRUITS ATTRACTIVE TO BIRDS ARE AVAILABLE

FIGURE 1.--Map of the United States, showing the 10 regions used in presenting information on fruits attractive to birds.

As an aid in requesting leaflets, it should be noted that No. BS-41 is for region 1; BS-42, for region 2, etc., with BS-50 for region 10.

INTRODUCTION

The Rocky Mountain States embrace greatly varied conditions for plants. Nevertheless they are rather generally occupied by a considerable number of fruit-bearing species (see Table 2). Three supplemental tables (3 to 5) list plants of more restricted distribution, while another three (6 to 8) show extralimital plants that have proved satisfactory on trial in parts of the region most densely inhabited by man.

Table 1 shows groups of fleshy fruits most attractive to birds throughout the United States and lists desirable kinds of birds most fond of the fruit. No barberries, currants, or buckthorns are listed, because they harbor rusts destructive to plants of economic importance. Junipers are in almost the same category, as they serve as alternate hosts for apple rust, but there is no reason why they cannot be used in districts where apples are not commercially grown, as they are among the most valuable plants for wildlife. Omitted also are plants poisonous to man on contact, as poison ivy and poison sumac, as well as various kinds dangerously poisonous to domestic animals, as yews, wild cherries, and nightshades, in spite of the fact that wild cherries are greatly relished by birds. Browsing animals are known to have been killed by feeding on the leaves of wild cherries but do not seem to be so seriously affected by those of plums. Certain plants included among fleshy fruit bearers in previous publications have been transferred to the list of seed producers, hence do not appear in the present series of leaflets. These include magnolia (Magnolia), bittersweet (Celastrus), and burningbush (Euonymus).

It should be noted that the fruit-bearing seasons recorded, being collected from varied sources, tend to be maxima. As a rule they are not likely to be realized or even approached in a single locality unless numerous specimens of a given species are present and so distributed in sun and shade as to favor both early and late fruiting.

The word "extralimital" as here used in certain table headings covers plants from other States or regions of the United States as well as wholly introduced, exotic, or foreign plants.

TABLE 1. - Groups of fleshy fruits^{1/} most attractive to birds throughout the
United States

Name of fruit		Species of birds known to eat the fruit	
Common	Generic	Num- ber	Desirable kinds most fond of the fruit
Juniper; redcedar ^{3/}	Juniperus	50	Flicker, mockingbird, robin, eastern bluebird, cedar waxwing, myrtle warbler, evening and pine grosbeaks, purple finch.
Greenbrier	Smilax	43	Mockingbird, catbird, brown thrasher, robin, hermit thrush, cardinal.
Bayberry	Myrica	85	Bobwhite, flicker, downy woodpecker, eastern phoebe, tree swallow, black-capped chickadee, Carolina wren, catbird, brown thrasher, hermit thrush, eastern bluebird, white-eyed vireo, myrtle warbler, meadowlark, towhee.
Hackberry	Celtis	47	Flicker, yellow-bellied sapsucker, mockingbird, brown thrasher, robin, eastern bluebird, cedar waxwing, cardinal.
Mulberry	Morus	59	Yellow-billed cuckoo, red-bellied, red-headed, and downy woodpeckers, eastern kingbird, mockingbird, catbird, robin, wood thrush, cedar waxwing, red-eyed vireo, yellow warbler, orchard and Baltimore orioles, scarlet tanager, cardinal, purple finch.
Pokeberry	Phytolacca ...	52	Mourning dove, flicker, eastern kingbird, mockingbird, catbird, robin, hermit, olive-backed, and gray-cheeked thrushes, eastern bluebird, cardinal.
Spicebush	Benzoin	17	Eastern kingbird, wood thrush, veery, red-eyed vireo.
Sassafras	Sassafras	18	Bobwhite, eastern kingbird, catbird, robin, veery, red-eyed vireo.
Strawberry	Fragaria	52	Catbird, brown thrasher, robin, wood thrush, towhee.

TABLE 1. - Groups of fleshy fruits most attractive to birds throughout the United States--Continued

Name of fruit		Species of birds known to eat the fruit	
Common	Generic	Number	Desirable kinds most fond of the fruit
Raspberry, black-berry	Rubus	146	Ruffed grouse, bobwhite, flicker, red-headed woodpecker, eastern kingbird, tufted titmouse, wren tit, mockingbird, catbird, brown thrasher, robin, wood and olive-backed thrushes, eastern bluebird, cedar waxwing, red-eyed vireo, orchard and Baltimore orioles, cardinal, rose-breasted, black-headed, and pine grosbeaks, red-eyed, spurred, and California towhees, white-throated, fox, and song sparrows.
Rose	Rosa	38	Ruffed and sharp-tailed grouse, prairie chicken, bobwhite.
Mountain-ash	Sorbus	13	Red-headed woodpecker, catbird, brown thrasher, robin, Bohemian and cedar waxwings, Baltimore oriole, evening and pine grosbeaks.
Chokeberry	Aronia	21	Brown thrasher, meadowlark.
Hawthorn	Crataegus ...	39	Ruffed grouse, robin, purple finch, pine grosbeak.
Apple	Malus	43	Ruffed grouse, ring-necked pheasant, mockingbird, robin, cedar waxwing, purple finch, pine grosbeak, red crossbill.
Juneberry	Amelanchier .	42	Flicker, catbird, robin, hermit thrush, veery, cedar waxwing, Baltimore oriole.
Sumac ^{4/}	Rhus	97	Ruffed grouse, bobwhite, valley quail, northern and red-shafted flickers, red-bellied and downy woodpeckers, phoebe, black-capped and Carolina chickadees, wren tit, Carolina wren, mockingbird, catbird, brown and California thrashers, robin, hermit thrush, eastern bluebird, white-eyed vireo, towhee, Audubon's warbler, goldfinch, golden-crowned sparrow.
Pepperberry	Schinus	12	Robin, varied and hermit thrushes, cedar waxwing, phainopepla.

TABLE 1. - Groups of fleshy fruits most attractive to birds throughout the United States--Continued

Name of fruit		Species of birds known to eat the fruit	
Common	Generic	Number	Desirable kinds most fond of the fruit
Holly	Ilex	48	Ruffed grouse, bobwhite, valley quail, flicker, yellow-bellied sapsucker, mockingbird, catbird, brown thrasher, robin, hermit thrush, eastern bluebird, cedar waxwing.
Supplejack.....	Berchemia ...	15	Mockingbird, robin.
Grape	Vitis	87	Ruffed grouse, bobwhite, northern and red-shafted flickers, pileated and red-bellied woodpeckers, eastern kingbird, mockingbird, catbird, brown thrasher, robin, wood thrush, veery, eastern and western bluebirds, cedar waxwing, cardinal.
Virginia creeper .	Ampelopsis ..	38	Flicker, red-bellied and red-headed woodpeckers, yellow-bellied sapsucker, tufted titmouse, mockingbird, brown thrasher, robin, hermit, olive-backed, and gray-cheeked thrushes, eastern bluebird, red-eyed vireo, scarlet tanager, evening grosbeak, purple finch.
Buffaloberry	Shepherdia ..	18	Sharp-tailed grouse, pine grosbeak.
Silverberry, Russian olive, etc.	Elaeagnus ...	5/	Prairie chicken, sharp-tailed grouse, catbird, robin, cedar waxwing.
Wild-sarsaparilla	Aralia	16	Bobwhite, robin.
Dogwood	Cornus	93	Ruffed grouse, bobwhite, northern and red-shafted flickers, downy woodpecker, eastern kingbird, catbird, brown thrasher, robin, wood, hermit, olive-backed, and gray-cheeked thrushes, eastern bluebird, cedar waxwing, red-eyed and warbling vireos, cardinal, evening and pine grosbeaks, purple finch, white-throated and song sparrows.
Sourgum, tupelo ..	Nyssa	39	Flicker, robin, olive-backed and gray-cheeked thrushes, cedar waxwing, purple finch.
Crowberry	Empetrum	40	Pine grosbeak, snow bunting.
Bearberry, manzanita	Arctostaphylos	34	Dusky and ruffed grouse, valley and mountain quail, wren tit, fox sparrow.

TABLE 1. - Groups of fleshy fruits most attractive to birds throughout the United States--Continued

Name of fruit		Species of birds known to eat the fruit	
Common	Generic	Number	Desirable kinds most fond of the fruit
Wintergreen	Gaultheria ..	10	Ruffed grouse, wren tit.
Huckleberry	Gaylussacia .	46	Robin, pine grosbeak, towhee.
Blueberry	Vaccinium ...	93	Ruffed grouse, valley quail, eastern kingbird, black-capped chickadee, tufted titmouse, catbird, brown thrasher, robin, hermit thrush, eastern bluebird, cedar waxwing, orchard oriole, pine grosbeak, towhee.
Beautyberry	Callicarpa .	11	Mockingbird, brown thrasher.
Partridgeberry ...	Mitchella ...	10	Ruffed grouse.
Elderberry	Sambucus	118	Valley quail, flicker, red-headed woodpecker, eastern and Arkansas kingbirds, black phoebe, wren tit, mockingbird, catbird, brown and California thrashers, robin, olive-backed thrush, eastern and western bluebirds, phainopepla, red-eyed vireo, rose-breasted and black-headed grosbeaks, California towhee, white-crowned sparrow.
Snowberry, coralberry	Symphoricarpos	33	Sharp-tailed grouse, varied thrush, evening and pine grosbeaks.
Blackhaw, cranberrybush	Viburnum	35	Ruffed grouse, yellow-billed cuckoo, flicker, catbird, brown thrasher, robin, eastern bluebird, cedar waxwing, rose-breasted grosbeak, purple finch.
Honeysuckle	Lonicera	18	Bobwhite, catbird, brown thrasher, robin, hermit thrush, pine grosbeak, white-throated sparrow.

1/ Barberries (*Berberis*), buckthorns (*Rhamnus*), and currants (*Ribes*) are omitted because they serve as alternate hosts of rusts, attacking wheat, oats, and white pine, respectively. Yews (*Taxus*), wild cherries (*Prunus*), and nightshades (*Solanum*) also are omitted as being dangerous stock poisoning plants.

2/ When 10 or more.

3/ Carries apple rust; should not be planted near valuable orchards.

4/ Only nonpoisonous species of sumac are considered.

5/ Data given are based entirely on field observations; total number of birds eating the various species of *Elaeagnus* unknown.

TABLE 2. - Generally distributed native fruits of Montana, Wyoming, and Colorado for which satisfactory data on fruiting seasons are available

Common name	Scientific name	Fruiting season
Colorado juniper	<i>Juniperus scopulorum</i>	All year.
Common juniper	<i>Juniperus communis</i>	Do.
Carrion-flower	<i>Smilax herbacea</i>	Mid-August to mid-October.
White-flowering rasp- berry.	<i>Rubus parviflorus</i>	Late July to early October.
Red raspberry	<i>Rubus strigosus</i>	Mid-July to early September.
Wild strawberry	<i>Fragaria ovalis</i>	Mid-June to mid-August.
Wild rose	<i>Rosa sayi</i>	Mid-July to late September.
Do.	<i>Rosa woodsii</i>	All year.
Do.	<i>Rosa nutkana</i>	Do.
Serviceberry	<i>Amelanchier alnifolia</i>	Mid-June to late September.
River hawthorn	<i>Crataegus rivularis</i>	Early August to early October.
Black hawthorn	<i>Crataegus douglasii</i>	Mid-July to late November.
Squaw-apple	<i>Peraphyllum ramosissimum</i> .	Mid-May to mid-August.
Mountain-ash	<i>Sorbus scopulina</i>	Late June to late December.
Wild plum	<i>Prunus americana</i>	Mid-June to mid-September.
Skunk-bush	<i>Rhus trilobata</i>	Late May to early October.
Virginia creeper	<i>Ampelopsis quinquefolia</i> ..	Early August to late December.
Silverberry	<i>Elaeagnus argentea</i>	All year.
Silver buffaloberry .	<i>Shepherdia argentea</i>	Early July to late October.
Russet buffaloberry	<i>Shepherdia canadensis</i>	Early June to mid-October.
Wild sarsaparilla ...	<i>Aralia nudicaulis</i>	Late June to mid-August.
Bunchberry	<i>Cornus canadensis</i>	Late July to late October.
Red-osier	<i>Cornus stolonifera</i>	Mid-June to late October.
Wintergreen	<i>Gaultheria humifusa</i>	Late July to late December.
Bearberry	<i>Arctostaphylos uva-ursi</i> ..	All year.
Blueberry	<i>Vaccinium oreophilum</i>	Late June to early October.
Do.	<i>Vaccinium scoparium</i>	Mid-July to late August.
Elderberry	<i>Sambucus melanocarpa</i>	Mid-July to mid-September.
Do.	<i>Sambucus microbotrys</i>	Early July to mid-September.
Blackhaw	<i>Viburnum lentago</i>	Late June to late December.
Cranberrybush	<i>Viburnum pauciflorum</i>	Early July to late December.
Snowberry	<i>Symphoricarpos occidentalis</i>	Mid-June to late October.
Do.	<i>Symphoricarpos racemosus</i> .	Late July to late October.
Honeysuckle	<i>Lonicera involucrata</i>	Mid-June to mid-September.
Do.	<i>Lonicera utahensis</i>	Late June to early September.

TABLE 3. - Native fruits of Montana for which less satisfactory data on fruiting seasons are available

(Abbreviations indicate sections of the State by points of the compass)

Common name	Scientific name	Remarks
Whitebark raspberry	<i>Rubus leucodermis</i>	W.
Strawberry	<i>Fragaria americana</i>	July.
Do.	<i>Fragaria platypetala</i> ...	
Wild rose	<i>Rosa arkansana</i>	
Do.	<i>Rosa macdougalii</i>	W.
Do.	<i>Rosa gymnocarpa</i>	W. July to September.
Do.	<i>Rosa pisocarpa</i>	
Sumac	<i>Rhus occidentalis</i>	W.
Riverbank grape	<i>Vitis vulpina</i>	E.
Devilsclub	<i>Fatsia horrida</i>	W.
Blueberry	<i>Vaccinium membranaceum</i> .	July to September.
Do.	<i>Vaccinium caespitosum</i> ..	
Elderberry	<i>Sambucus glauca</i>	W. August to September.
Do.	<i>Sambucus decipiens</i>	
Snowberry	<i>Symphoricarpos rotundi-</i> <i>folius.</i>	
Honeysuckle	<i>Lonicera coerulea</i>	
Do.	<i>Lonicera glaucescens</i> ...	

TABLE 4. - Native fruits of Wyoming for which less satisfactory data on fruiting seasons are available

Common name	Scientific name	Remarks
Juniper	<i>Juniperus horizontalis</i> .	NE.
Do.	<i>Juniperus knighti</i>	SW.
Wild rose	<i>Rosa fendleri</i>	July to September.
Do.	<i>Rosa pratincola</i>	E.
Serviceberry	<i>Amelanchier oreophila</i> ..	
Hawthorn	<i>Crataegus wheeleri</i>	
Smooth sumac	<i>Rhus glabra</i>	NE. July to September.
Riverbank grape	<i>Vitis vulpina</i>	E. July to August.
Blueberry	<i>Vaccinium occidentale</i> ..	W.
Elderberry	<i>Sambucus canadensis</i>	NE.
Cranberrybush	<i>Viburnum opulus</i>	E.
Nannyberry	<i>Viburnum lentago</i>	E. July to August
Honeysuckle	<i>Lonicera coerulea</i>	W.
Do.	<i>Lonicera ciliata</i>	E.

TABLE 5. - Native fruits of Colorado for which less satisfactory data on fruiting seasons are available

Common name	Scientific name	Remarks
Juniper	<i>Juniperus utahensis</i>	W.
Do.	<i>Juniperus monosperma</i>	All year.
Do.	<i>Juniperus horizontalis</i> ...	N.
Hackberry	<i>Celtis reticulata</i>	W. July to August.
Do.	<i>Celtis douglasii</i>	
Strawberry	<i>Fragaria americana</i>	E. July to August.
Do.	<i>Fragaria prolifica</i>	Mountains.
Do.	<i>Fragaria glauca</i>	July to August.
Boulder raspberry .	<i>Rubus deliciosus</i>	Mid-June to August.
Wild rose	<i>Rosa macounii</i>	E.
Do.	<i>Rosa fendleri</i>	August to October.
Do.	<i>Rosa bourgeauiana</i>	
Do.	<i>Rosa pratincola</i>	
Serviceberry	<i>Amelanchier oreophila</i>	
Squaw-apple	<i>Peraphyllum ramosissimum</i> .	W. Mid-May to mid-August.
Hawthorn	<i>Crataegus wheeleri</i>	
Do.	<i>Crataegus cerronis</i>	
Smooth sumac	<i>Rhus glabra</i>	
Riverbank grape ...	<i>Vitis vulpina</i>	E.
Thicket creeper ...	<i>Ampelopsis vitacea</i>	July to October.
Whortleberry	<i>Vaccinium erythrococcum</i> ..	W.
Do.	<i>Vaccinium caespitosum</i>	W.
Adelia	<i>Forestiera neomexicana</i> ...	S.
Matrimony-vine	<i>Lycium pallidum</i>	S.
Elder	<i>Sambucus neomexicana</i>	S.
Snowberry	<i>Symphoricarpos oreophilus</i> .	August to September.

TABLE 6. - Extralimital fruits that have been recommended for Montana

Common name	Scientific name
Chinese juniper	<i>Juniperus chinensis</i> .
Redcedar	<i>Juniperus virginiana</i> .
Russian mulberry	<i>Morus alba</i> var. <i>tatarica</i> .
Rugosa rose	<i>Rosa rugosa</i> .
Purpleleaf plum	<i>Prunus pissardi</i> .
Mountain-ash	<i>Sorbus aucuparia</i> .
Do.	<i>Sorbus americana</i> .
Do.	<i>Sorbus arbutifolia</i> .
Do.	<i>Sorbus quercifolia</i> .
Serviceberry	<i>Amelanchier canadensis</i> .
Thicket hawthorn	<i>Crataegus coccinea</i> .
Siberian crab	<i>Pyrus baccata</i> .
Cutleaf sumac	<i>Rhus typhina</i> var. <i>laciniata</i> .

TABLE 6. - Extralimital fruits that have been recommended
for Montana--Continued

Common name	Scientific name
Sea buckthorn	Hippophaë rhamnoides.
Engelmann creeper	Ampelopsis quinquefolia var. engelmanni.
Russian olive	Elaeagnus angustifolia.
Spiny aralia	Acanthopanax sessiliflorum.
Chinese aralia	Aralia chinensis var. mandshurica.
Coral dogwood	Cornus alba var. sibirica.
European cranberrybush	Viburnum opulus.
Thorn honeysuckle	Lonicera spinosa.
Tatarian honeysuckle .	Lonicera tatarica.

TABLE 7. - Extralimital fruits that have been recommended
for Wyoming

Common name	Scientific name
Russian mulberry	Morus alba tatarica.
Mountain-ash	Sorbus americana.
Siberian crab	Pyrus baccata.
Russian olive	Elaeagnus angustifolia.
Matrimony-vine	Lycium halimifolium.
Tatarian honeysuckle .	Lonicera tatarica.

TABLE 8. - Extralimital fruits that have been recommended
for Colorado

Common name	Scientific name
Hackberry	Celtis occidentalis.
White mulberry	Morus alba.
Russian mulberry	Morus alba tatarica.
Red mulberry	Morus rubra.
Mountain-ash	Sorbus americana.
Dwarf sumac	Rhus copallina.
Staghorn sumac	Rhus typhina.
Russian olive	Elaeagnus angustifolia.
Flowering dogwood	Cornus florida.
Amur privet	Ligustrum amurense.
Matrimony-vine	Lycium halimifolium.
European cranberrybush	Viburnum opulus.
Wayfaring-tree	Viburnum lantana.
Blackhaw	Viburnum prunifolium.
Elderberry	Sambucus canadensis.
Tatarian honeysuckle .	Lonicera tatarica.

LITERATURE

Publications of interest in connection with fruits for the Rocky Mountain States include:

Region

Flora of the Rocky Mountains and adjacent plains, by P. A. Rydberg, xii+1110 pp., 1917. Inquire as to price from the Botanic Garden, New York, N. Y.

Wyoming

Growing trees in Northeastern Wyoming, by Paul K. Thompson. Agr. Expt. Sta. Bull. 192, 12 pp., illus., December 1932. Inquire as to conditions governing distribution from the University of Wyoming, Laramie, Wyo.

Colorado

Improvement of home grounds in Colorado, by George Beach. Agr. Expt. Sta. Bull. 374, 51 pp., illus., July 1931. Inquire as to conditions governing distribution from Colorado Agricultural College, Fort Collins, Colo.

Tree windbreaks for Colorado, by R. E. Ford. Extension Service Bull. 326-A, 23 pp., illus., January 1933. Inquire as to conditions governing distribution from Colorado Agricultural College, Fort Collins, Colo.