mottled; the tail greyish-brown, becoming black toward the end, the middle feathers undulated like the back, and having four grey bands with a terminal white one. The sides of the head and the throat are greyish-white, undulatingly barred with brown; the general colour of the fore-neck is greyish-brown, with pale sienna bands; on the breast the colour is brownish-grey, and the colours and markings of the rest of the under parts are as in the male, but paler.

Length to end of tail $19\frac{1}{4}$ inches; wing from flexure 9; tail $6\frac{1}{4}$; bill along the ridge $\frac{1}{2}$.

In a specimen in my possession, killed by Mr. TOWNSEND on the "Columbia river, Sept. 26, 1834," the tail is considerably rounded, the lateral feathers being 7 twelfths shorter than the longest remaining, the middle feathers being lost. The tail is deep black, with a terminal band of ash-grey, half an inch in breadth. It is therefore probable, that when the tail is unworn, it is distinctly rounded, and tipped with grey.

THE PINNATED GROUSE.

†TETRAO CUPIDO, *Linn.*

PLATE CCXCVI.—MALES AND FEMALE.

It has been my good fortune to study the habits of this species of Grouse, at a period when, in the district in which I resided, few other birds of any kind were more abundant. I allude to the lower parts of the States of Kentucky, Indiana, Illinois and Missouri. Twenty-five years and more have elapsed since many of the notes to which I now recur were written, and at that period I little imagined that the observations which I recorded should ever be read by any other individuals than those composing my own family, all of whom participated in my admiration of the works of Nature.

The Barrens of Kentucky are by no means so sterile as they have sometimes been represented. Their local appellation, however, had so much deceived me, before I travelled over them, that I expected to find nothing but an undulated extent of rocky ground, destitute of vegetation, and perforated by numberless caverns. My ideas were soon corrected. I saw

the Barrens for the first time in the early days of June, and as I entered them from the skirts of an immense forest, I was surprised at the beauty of the prospect before me. Flowers without number, and vying with each other in their beautiful tints, sprung up amidst the luxuriant grass; the fields, the orchards, and the gardens of the settlers, presented an appearance of plenty, scarcely any where exceeded; the wild fruit-trees, having their branches interlaced with grape-vines, promised a rich harvest; and at every step I trod on ripe and fragrant strawberries. When I looked around, an oak knob rose here and there before me, a charming grove embellished a valley, gently sloping hills stretched out into the distance, while at hand the dark entrance of some cavern attracted my notice, or a bubbling spring gushing forth at my feet seemed to invite me to rest and refresh myself with its cooling waters. The timid deer snuffed the air, as it gracefully bounded off, the Wild Turkey led her young ones in silence among the tall herbage, and the bees bounded from flower to blossom. If I struck the stiff foliage of a black-jack oak, or rustled among the sumachs and brambles, perchance there fluttered before me in dismay the frightened Grouse and her cowering brood. The weather was extremely beautiful, and I thought that the Barrens must have been the parts from which Kentucky derived her name of the "Garden of the West!"

There it was, that, year after year, and each successive season, I studied the habits of the Pinnated Grouse. It was there that, before sunrise, or at the close of day, I heard its curious boomings, witnessed its obstinate battles, watched it during the progress of its courtships, noted its nest and eggs, and followed its young until, fully grown, they betook themselves to their winter quarters.

When I first removed to Kentucky, the Pinnated Grouse were so abundant, that they were held in no higher estimation as food than the most common flesh, and no "hunter of Kentucky" deigned to shoot them. They were, in fact, looked upon with more abhorrence than the Crows are at present in Massachusetts and Maine, on account of the mischief they committed among the fruit trees of the orchards during winter, when they fed on their buds, or while in the spring months they picked up the grain in the fields. The farmer's children, or those of his negroes, were employed to drive them away with rattles from morning to night, and also caught them in pens and traps of various kinds. In those days, during the winter, the Grouse would enter the farm-yard and feed with the poultry, alight on the houses, or walk in the very streets of the villages. I recollect having caught several in a stable at Henderson, where they had followed some Wild Turkeys. In the course of the same winter, a friend of mine, who was fond of practising rifle-shooting, killed upwards of forty in one morning, but

picked none of them up, so satiated with Grouse was he, as well as every member of his family. My own servants preferred the fattest flitch of bacon to their flesh, and not unfrequently laid them aside as unfit for cooking.

Such an account may appear strange to you, reader; but what will you think when I tell you, that, in that same country, where, twenty-five years ago they could not have been sold at more than one cent a-piece, scarcely one is now to be found? The Grouse have abandoned the State of Kentucky, and removed (like the Indians) every season farther to the westward, to escape from the murderous white man. In the Eastern States, where some of these birds still exist, game-laws have been made for their protection during a certain part of the year, when, after all, few escape to breed the next season. To the westward you must go as far at least as the State of Illinois, before you meet with this species of Grouse, and there too, as formerly in Kentucky, they are decreasing at a rapid rate. The sportsman of the Eastern States now makes much ado to procure them, and will travel with friends and dogs, and all the paraphernalia of hunting, a hundred miles or more, to shoot at most a dozen braces in a fortnight; and when he returns successful to the city, the important results are communicated to all concerned. So rare have they become in the markets of Philadelphia, New York and Boston, that they sell at from five to ten dollars the pair. An excellent friend of mine, resident in the city of New York, told me that he refused 100 dollars for ten brace, which he had shot on the Pocano mountains of Pennsylvania.

On the eastern declivities of our Atlantic coast, the districts in which the Pinnated Grouse are still to be met with, are some portions of the State of New Jersey, the "brushy" plains of Long Island, Martha's Vineyard, the Elizabeth Islands, Mount Desert Island in the State of Maine, and a certain tract of barren country in the latter State, lying not far from the famed Mar's Hill, where, however, they have been confounded with the Willow Grouse. In the three first places mentioned, notwithstanding the preventive laws now in force, they are killed without mercy by persons such as in England are called poachers, even while the female bird is in the act of sitting on her eggs. Excepting in the above named places, not a bird of the species is at present to be found, until you reach the lower parts of Kentucky, where, as I have told you before, a few still exist. In the State of Illinois, all the vast plains of the Missouri, those bordering the Arkansas river, and on the prairies of Opellousas, the Pinnated Grouse is still very abundant, and very easily procured.

As soon as the snows have melted away, and the first blades of grass issue from the earth, announcing the approach of spring, the Grouse, which had

congregated during the winter in great flocks, separate into parties of from twenty to fifty or more. Their love season commences, and a spot is pitched upon to which they daily resort until incubation is established. Inspired by love, the male birds, before the first glimpse of day lightens the horizon, fly swiftly and singly from their grassy beds, to meet, to challenge, and to fight the various rivals led by the same impulse to the arena. The male is at this season attired in his full dress, and enacts his part in a manner not surpassed in pomposity by any other bird. Imagine them assembled, to the number of twenty, by day-break, see them all strutting in the presence of each other, mark their consequential gestures, their looks of disdain, and their angry pride, as they pass each other. Their tails are spread out and inclined forwards, to meet the expanded feathers of their neck, which now, like stiffened frills, lie supported by the globular orange-coloured receptacles of air, from which their singular booming sounds proceed. Their wings, like those of the Turkey Cock, are stiffened and declined so as to rub and rustle on the ground, as the bird passes rapidly along. Their bodies are depressed towards the ground, the fire of their eyes evinces the pugnacious workings of the mind, their notes fill the air around, and at the very first answer from some coy female, the heated blood of the feathered warriors swells every vein, and presently the battle rages. Like Game Cocks they strike, and rise in the air to meet their assailants with greater advantage. Now many close in the encounter; feathers are seen whirling in the agitated air, or falling around them tinged with blood. The weaker begin to give way, and one after another seek refuge in the neighbouring bushes. The remaining few, greatly exhausted, maintain their ground, and withdraw slowly and proudly, as if each claimed the honours of victory. The vanquished and the victors then search for the females, who, believing each to have returned from the field in triumph, receive them with joy.

It not unfrequently happens that a male already mated is suddenly attacked by some disappointed rival, who unexpectedly pounces upon him after a flight of considerable length, having been attracted by the cacklings of the happy couple. The female invariably squats next to and almost under the breast of her lord, while he, always ready for action, throws himself on his daring antagonist, and chases him away never to return. Such is the moment which I have attempted to represent in the plate.

In such places in the Western country as I have described, the "Prairie Hen" is heard "booming" or "tooting" not only before break of day, but frequently at all hours from morning until sunset; but in districts where these birds have become wild in consequence of the continual interference of man, they are seldom heard after sunrise, sometimes their meetings are

noiseless, their battles are much less protracted, or of less frequent occurrence, and their beats or scratching grounds are more concealed. Many of the young males have battles even in autumn, when the females generally join, not to fight, but to conciliate them, in the manner of the Wild Turkeys.

The Pinnated Grouse forms its nest, according to the latitude of the place, between the beginning of April and the 25th of May. In Kentucky I have found it finished and containing a few eggs at the period first mentioned, but I think, taking the differences of seasons into consideration, the average period may be about the first of May. The nest, although carelessly formed of dry leaves and grasses, interwoven in a tolerably neat manner, is always carefully placed amidst the tall grass of some large tuft, in the open ground of the prairies, or at the foot of a small bush in the barren lands. The eggs are from eight to twelve, seldom more, and are larger than those of the *Tetrao umbellus*, although nearly of the same colour. The female sits upon them eighteen or nineteen days, and the moment the young have fairly disengaged themselves, leads them away from the nest, when the male ceases to be seen with her. As soon as autumn is fairly in, the different families associate together, and at the approach of winter I have seen packs composed of many hundred individuals.

When surprised, the young squat in the grass or weeds, so that it is almost impossible to find any of them. Once, while crossing a part of the barrens on my way homewards, my horse almost placed his foot on a covey that was in the path. I observed them, and instantly leaped to the ground; but notwithstanding all my endeavours, the cunning mother saved them by a single cluck. The little fellows rose on the wing for only a few yards, spread themselves all round, and kept themselves so close and quiet, that, although I spent much time in search for them, I could not discover one. I was much amused, however, by the arts the mother employed to induce me to leave the spot where they lay concealed, when perhaps I was actually treading on some of them.

This species never raises more than one brood in the season, unless the eggs have been destroyed, in which case the female immediately calls for her mate, and produces a second set of eggs, generally much smaller in number than the first. About the 1st of August, the young are as large as our little American Partridge, and are then most excellent eating. They do not acquire much strength of wing until the middle of October, and after that period they become daily more difficult to be approached. Their enemies are at this season very numerous, but the principal are the Polecat, the Racoon, the Weasel, the Wild Cat, and various Hawks.

The Pinnated Grouse is easily tamed, and easily kept. It also breeds in confinement, and I have often felt surprised that it has not been fairly domes-

ticated. While at Henderson, I purchased sixty alive, that were expressly caught for me within twelve miles of that village, and brought in a bag laid across the back of a horse. I cut the tips of their wings, and turned them loose in a garden and orchard about four acres in extent. Within a week they became tame enough to allow me to approach them without their being frightened. I supplied them with abundance of corn, and they fed besides on vegetables of various kinds. This was in the month of September, and almost all of them were young birds. In the course of the winter they became so gentle as to feed from the hand of my wife, and walked about the garden like so many tame fowls, mingling occasionally with the domestic poultry. I observed that at night each individual made choice of one of the heaps in which a cabbage had grown, and that they invariably placed their breast to the wind, whatever way it happened to blow. When spring returned, they strutted, "tooted," and fought, as if in the wilds where they had received their birth. Many laid eggs, and a good number of young ones made their appearance, but the Grouse at last proved so destructive to the young vegetables, tearing them up by the roots, that I ordered them to be killed. So brave were some of the male birds, that they never flinched in the presence of a large Turkey Cock, and now and then they would stand against a dunghill cock, for a pass or two, before they would run from him.

During very severe weather, I have known this species to roost at a considerable height on trees, but they generally prefer resting on the ground. I observed that for several nights in succession, many of these Grouse slept in a meadow not far distant from my house. This piece of ground was thickly covered with tall grass, and one dark night I thought of amusing myself by trying to catch them. I had a large seine, and took with me several negroes supplied with lanterns and long poles, with the latter of which they bore the net completely off the ground. We entered the meadow in the early part of the night, although it was so dark that without a light one could hardly have seen an object a yard distant, and spreading out the leaded end of the net, carried the other end forward by means of the poles at the height of a few feet. I had marked before dark a place in which a great number of the birds had alighted, and now ordered my men to proceed towards it. As the net passed over the first Grouse in the way, the alarmed bird flew directly towards the confining part of the angle, and almost at the same moment a great number of others arose, and, with much noise, followed the same direction. At a signal, the poles were laid flat on the ground, and we secured the prisoners, bagging some dozens. Repeating our experiment three times in succession, we met with equal success, but now we gave up the sport on account of the loud bursts of laughter from the negroes, who could no longer refrain. Leaving the net on the ground, we returned to the

house laden with spoil, but next evening not a Grouse was to be found in the meadow, although I am confident that several hundreds had escaped.

On the ground the Pinnated Grouse exhibits none of the elegance of manner observed in the Ruffed Grouse, but walks more like the Common Hen, although in a more erect attitude. If surprised, it rises at once with a moderate whirring sound of the wings; but if it happens to see you at a distance, and the place is clear, it instantly runs off with considerable speed, and stops at the first tuft of high grass or bunch of briar, when it squats, and remains until put up. In newly ploughed grounds I have seen them run with all their might, their wings partially expanded, until suddenly meeting with a large clod, they would stop, squat, and disappear in a moment. During the noontide hours, several may often be seen dusting themselves near each other, either on the ploughed fields or the dry sandy roads, and re-arranging their feathers in a moment, in the same manner as the Wild Turkey. Like the Common Fowls, they watch each other's motions, and if one has discovered a grasshopper, and is about to chase it, all the rest within sight of it either fly or run up to the place. When the mother of a brood is found with her young ones, she instantly ruffles up her feathers, and often looks as if she would fly at you; but this she never ventures to do, although she tries every art to decoy you from the place. On large branches of trees these birds walk with great ease, but on small ones they require the aid of their wings to enable them to walk steadily. They usually, if not always, roost singly within a few feet of each other, and on such little eminences as the ground affords. I have found them invariably fronting the wind, or the quarter from which it was to blow. It is only during the early age of the young birds that they sit on the ground in a circle.

The flight of the Prairie Hen is strong, regular, tolerably swift, and at times protracted to the distance of several miles. The whirring of its wings is less conspicuous than that of the Ruffed Grouse or "Pheasant" (*Tetrao umbellus*), and its flight is less rapid. It moves through the air with frequent beats, after which it sails with the wings bent downwards, balancing itself for a hundred yards or more, as if to watch the movements of its pursuer, for at this time they can easily be observed to look behind them as they proceed. They never rise when disturbed without uttering four or five distinct clucks, although at other times they fly off in silence. They are easily shot down by a calm sportsman, but are very apt to deceive a young hand. In the western country they rarely stand before the pointer, and I think the setter is a more profitable dog there. In the Eastern States, however, pointers, as I am informed, are principally employed. These birds rarely wait the approach of the sportsman, but often rise when he is at such a distance as to render it necessary for him to be very prompt in firing.

Unlike other species, they seldom pass over you, even when you surprise them, and if the country is wooded, they frequently alight on the highest branches of the tallest trees, where they are usually more accessible. If shot almost dead, they fall and turn round on the ground with great violence until life is extinct; but when less injured, they run with great celerity to some secluded place, where they remain so quiet and silent as to render it difficult to find them without a good dog. Their flesh is dark, and resembles that of the Red Grouse of Scotland, or the Spotted Grouse of North America.

The curious notes emitted in the love season are peculiar to the male. When the receptacles of air, which in form, colour, and size, resemble a small orange, are perfectly inflated, the bird lowers its head to the ground, opens its bill, and sends forth, as it were, the air contained in these bladders in distinctly separated notes, rolling one after another from loud to low, and producing a sound like that of a large muffled drum. This done, the bird immediately erects itself, refills its receptacles by inhalation, and again proceeds with its tootings. I frequently observed in those Prairie Hens which I had tamed at Henderson, that after producing the noise, the bags lost their rotundity, and assumed the appearance of a burst bladder, but that in a few seconds they were again inflated. Having caught one of the birds, I passed the point of a pin through each of its air-cells, the consequence of which was, that it was unable to toot any more. With another bird I performed the same operation on one only of the cells, and next morning it tooted with the sound one, although not so loudly as before, but could not inflate the one which had been punctured. The sound, in my opinion, cannot be heard at a much greater distance than a mile. All my endeavours to decoy this species, by imitating its curious sounds, were unsuccessful, although the Ruffed Grouse is easily deceived in this manner. As soon as the strutting and fighting are over, the collapsed bladders are concealed by the feathers of the ruff, and during autumn and winter are much reduced in size. These birds, indeed, seldom, if ever, meet in groups on the scratching grounds after incubation has taken place; at all events, I have never seen them fight after that period, for, like the Wild Turkeys, after spending a few weeks apart to recover their strength, they gradually unite, and as soon as the young are grown up, individuals of both sexes mix with the latter, and continue in company till spring. The young males exhibit the bladders and elongated feathers of the neck before the first winter, and by the next spring have attained maturity, although, as in many other species, they increase in size and beauty for several years.

As I have never shot these birds in the Eastern States, and therefore cannot speak from experience of the sport which they afford, I here introduce a very interesting letter from a well known sportsman, my friend

DAVID ECKLEY, Esq., residing at Boston, who is in the habit of shooting them annually.

“Dear Sir,—I have the pleasure of sending you a brace of Grouse from Martha’s Vineyard, one of the Elizabeth Islands, which for many years past I have been accustomed to visit annually, for the purpose of enjoying the sport of shooting these fine birds. Nashawenna is the only other island of the group on which they are found. This, however, is a sort of preserve, as the island being small and the birds few, strangers are not permitted to shoot without the consent of the owners of the soil. It would be difficult to assign a reason why they are found upon the islands above named, and not upon others, particularly Nashann, which, being large, well wooded, and abounding in feed, seems quite as favourable to the peculiar habits of the birds.

“Fifteen or twenty years ago, I know from my own experience, it was a common thing to see as many birds in a day as we now see in a week; but whilst they have grown scarcer, our knowledge of the ground has become more extended, so that the result of a few weeks’ residence of a party of three, with which I usually take the field, is ten brace of birds. Packs of twenty to fifty are now no longer seen, and the numbers have so diminished, in consequence of a more general knowledge of their value, the price in Boston market being five dollars per brace, that we rarely see of late more than ten or twelve collected together. It is often observed, however, that there is very little encouragement to be derived from the circumstance of falling in with a large number, and that the greater the pack, the more likely they are to elude the vigilance of the sportsman; though it must be acknowledged that it is a most exhilarating yet tantalizing sight, to start a large pack out of gunshot. To watch them as their wings glisten in the sun, alternately sailing, fluttering, and skimming over the undulating ground, apparently just about alighting, but exerting their strength and fluttering on once more, some old stager of the pack leading them beyond an intervening swell, out of harm’s way, beyond which all is conjecture as to the extent or the direction of their flight. In such a case, it is best to follow on as quick and as straight as possible, keeping the eye fixed upon the tree or bush, which served to mark them, and after having proceeded a reasonable distance in the direction which they have flown, if a “clear” or “cutting place” should lie in the course, the birds may be confidently expected to have alighted there. They never in fact settle down where the woods are thick, or the bushes close and tangled, but invariably in some open space, and often in the roads; neither do they start from thick foliage or briary places, but seek at once to disengage themselves from all embarrassment to their flight, by attaining the nearest open space, thus offering to the sportsman the

fairest mark of all game birds. It frequently happens that not one is killed on the first flight of a pack, as they are often very unexpectedly started, but on approaching them a second time with greater caution, success is more likely to follow, particularly if they have become scattered.

"Towards the middle of November, they have attained their average weight of nearly two pounds each, and nothing can be fuller, richer, or more game-like than their plumage. At this time of year, however, in sportsman's phrase, they will seldom "lie to the dog," but are easily started by every sound they hear. Even loud talking alarms them; for which reason, a high wind, which drowns the approach of danger, is the most desirable weather. A calm drizzly day is also favourable; for the birds being less likely to be disturbed by the glare of objects, venture into the old rye fields, the low edges of the wood, and the bushy pastures, to feed.

"It is seldom that we start a bird a second time in the exact spot where he has been seen to hover down, for no sooner do they alight than they run, and frequently into thick cover, from which they often attempt in vain to disentangle themselves. A dog is then necessary to scent the bird, which alternately runs and squats, until, being hard pressed, it rises, and frequently with a sound which resembles the syllables *coo, coo, coo*, uttered with rapidity. One good dog is better than two, and though sufficient, is absolutely necessary, for besides the enjoyment of observing his action generally, his challenging cheers and his pointing prepare you. But more than all, a dog is required in recovering those which are winged or not fatally wounded, which, but for his tracking them, would be entirely lost.

"The barberry, which abounds in many parts of Martha's Vineyard, is the principal food of the Grouse, particularly such as grow on low bushes, near the ground, and easily reached by the birds. They also feed on the boxberry or partridgeberry, the highland and lowland cranberry, rose-buds, pine and alder buds, acorns, &c. In summer, when young, they feed on the more succulent berries.

"We frequently meet with the remains of such as have been destroyed in various ways, but more particularly by the domestic cat, which prowls the woods in a wild state, and which often receives a very unwelcome salute for the mischief it does. Owls, Hawks, and Skunks also do their part towards the destruction of these valuable but defenceless birds. In these ways they are thinned off much more effectually than by the sportsman's gun. They frequent no particular soil, and, like all other hunting, wherever the feed is, there is the likeliest place for the game. In addition to this rule as a guide, we look for their fresh tracks among the sandy barberry hillocks, and along the numerous paths which intersect that remarkable part of the Vineyard called Tisbury Plain. Into this, should the birds fly from the edges, as they

sometimes do, it is almost impossible to start them a second time, as there are no trees or large objects to mark their flight. Being mostly covered with scrub oaks of a uniform height, with occasional mossy hollows, it affords them a place of refuge, into which they fly for protection, but from which they soon emerge, when the danger is past, to their more favourite haunts.

"I have only seen them in the month of November, but I am told that in the spring of the year, previous to the season of incubation, they congregate in large companies, in particular places, where they hold a grand tournament, fighting with great desperation, and doing one another all the mischief possible. In these chosen spots, it is said the cunning natives were accustomed to strew ashes, and rush upon them with sticks when blinded by the dust which they had raised. In later times, the custom of baiting them has proved more destructive to the species. In this way, very great but very unsportsman-like shots have often been made. Another practice has been that of stealing upon them unawares, guided by that peculiar sound for which they are remarkable in the spring of the year, called "tooting." By these and other means, to which I have adverted, the birds were diminishing in numbers from year to year; but it is to be hoped that they will revive again, as they are now protected by an act of the State of Massachusetts, passed in 1831, which limits the time of shooting them to the months of November and December, and imposes a penalty of ten dollars each bird for all that are killed, except in those two months."

In the western country, at the approach of winter, these birds frequent the tops of the sumach bushes, to feed on their seeds, often in such numbers that I have seen them bent by their weight; and I have counted more than fifty on a single apple tree, the buds of which they entirely destroyed in a few hours. They also alight on high forest trees on the margins of large rivers, such as the Mississippi, to eat grapes and the berries and leaves of the parasitical mistletoe. During several weeks which I spent on the banks of the Mississippi, above the mouth of the Ohio, I often observed flocks of them flying to and fro across the broad stream, alighting at once on the highest trees with as much ease as any other bird. They were then so abundant that the Indians, with whom I was in company, killed them with arrows whenever they chanced to alight on the ground or low bushes.

During the sowing season, their visits to the wheat and corn fields are productive of considerable damage. They are fond of grasshoppers, and pursue these insects as chickens are wont to do, sometimes to a distance of thirty or forty yards. They drink water like the common fowl when at liberty, and, like all other species of this family, are fond of dusting themselves in the paths, or among the earth of the fields.

I have often observed them carry their tail in the manner of the common

hen. During the first years of my residence at Henderson, in severe winters, the number of Grouse of this species was greatly augmented by large flocks of them that evidently came from Indiana, Illinois, and even from the western side of the Mississippi. They retired at the approach of spring, no doubt to escape from the persecution of man.

This species is abundant on all the prairies of Texas, and ranges along the shores of the Missouri as far as the head waters of that stream; but none have been observed on the Rocky Mountains, or on the plains of the Columbia river. The eggs measure two inches in length, by rather more than one and a half in breadth, and are nearly equally rounded at both ends. All the birds of this family that alight on trees and roost there, have the toes either destitute of feathers or partially naked. On the contrary, those which keep constantly on the ground, have these parts thickly feathered to the claws, more especially during winter. The latter birds roost standing in an almost erect posture, sometimes singly, sometimes in the manner of Partridges, that is, with their tails together and their heads outward. Those which roost on trees *lie down* on the branches, and perhaps do not need feathers on their toes, as these parts receive the warmth from their body while they are in this crouching posture, which they can enjoy in continuance, being less liable to be disturbed by quadrupeds than those that repose on the ground, and sleep erect, in order to be ready to fly off when surprised or approached at night.

PINNATED GROUSE, *Tetrao Cupido*, Wils. Amer. Orn., vol. iii. p. 104.

TETRAO CUPIDO, Bonap. Syn., p. 126.

PINNATED GROUSE, Nutt. Man., vol. i. p. 662.

PINNATED GROUSE, *Tetrao Cupido*, Aud. Orn. Biog., vol. ii. p. 490; vol. v. p. 559.

Male, 18, 27½.

Abundant from Texas throughout all the western prairies, to very high up the Missouri, Kentucky, Illinois and Ohio. Almost extirpated in the Middle and Eastern Districts. Resident.

Adult Male.

Bill short, robust; upper mandible with the dorsal outline curved, the edges overlapping, the tip declinate and rounded; lower mandible convex, broad, with the tip rounded. Nostrils basal, roundish, concealed by the feathers. Head small, neck rather long, body bulky. Feet of ordinary length; tarsus short, feathered; toes covered above with numerous short scutella, margined and pectinated; hind toe extremely short, two lateral equal, middle toe much longer; claws of ordinary length, strong, arched, rather obtuse, concave beneath.

Plumage compact, the feathers generally broad and rounded; those of the head and neck narrow, and proportionally shorter, excepting those of the crown, which are elongated. Two tufts of lanceolate, elongated feathers on the sides of the neck, under which is an oblong bare space on either side capable of being inflated. Lower tibial and tarsal feathers short, soft and blended. Wings short and curved, the primaries strong and narrow; fourth longest, third and fifth nearly equal, second longer than sixth, first much shorter. Tail very short, much rounded, sloping on both sides, of eighteen broad rounded feathers.

Bill dusky, paler beneath. Iris brown. Toes dull yellow, claws greyish-brown, the general colour of the upper parts is blackish-brown, transversely marked with broad undulating bands of light yellowish-red; the wing-coverts and secondaries of a lighter brown, tinged with grey, and barred with paler red, the latter only on the outer webs; primary quills greyish-brown, with black shafts, and spots of pale reddish on the outer webs, excepting towards the end. Tail dark greyish-brown, narrowly tipped with dull white, the two middle feathers mottled with brownish-red. Space from the bill to the eye, a band from the lower mandible over the cheek and the throat, pale yellowish-red or cream-colour; a band of blackish-brown under the eye, including the ear-coverts, and another about an inch and a half long on the side of the throat. Supra-ocular membrane scarlet; bare skin of the sounding-bladder dusky orange. The long feathers of the cervical tufts are dark brown on the outer webs, pale yellowish-red and margined with dusky on the inner, excepting the lowest, which are all brownish-black. The lower parts are marked with large transverse curved bands of greyish-brown and pale yellowish-grey, the tints deeper on the anterior parts and under the wings. Under tail-coverts arranged in three sets, the middle feathers convex, involute, white, with two concealed brown spots; the lateral larger, of the same form, abrupt, variegated with dusky red and white, the extremity of the latter colour, but with a very narrow terminal margin of black. The tibial and tarsal feathers are grey, obscurely and minutely banded with yellowish-brown.

Length 18 inches, extent of wings $27\frac{1}{2}$; bill along the back $\frac{7}{12}$, along the edge $\frac{11}{12}$; tarsus $1\frac{1}{2}$; weight 1 lb. 13 oz.

Adult Female.

The female is considerably smaller, and wants the crest, cervical tufts and air-bags, but in other respects resembles the male.

Penated White Grouse.
Lekus hyperboreus.
1. 2. Males. 3. Female

Drawn from Nature by J. J. Audubon F.R.S. F.L.S.

Engraved & Col'd by J. T. Bowen. Philad.

Audubon, John James. 1842. "The Pinnated Grouse, *Tetrao cupido*, Linn. [Pl. 296]." *The birds of America : from drawings made in the United States and their territories* 5, 93–105. <https://doi.org/10.5962/p.319410>.

View This Item Online: <https://www.biodiversitylibrary.org/item/124982>

DOI: <https://doi.org/10.5962/p.319410>

Permalink: <https://www.biodiversitylibrary.org/partpdf/319410>

Holding Institution

Smithsonian Libraries

Sponsored by

Biodiversity Heritage Library

Copyright & Reuse

Copyright Status: NOT_IN_COPYRIGHT

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.