

27.- Family CATHARTIDAE

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The American Vultures

Though the Old World vultures differ little in structure from the birds of the hawk family and are ordinarily included in that family, the American vultures while superficially like the Old World ones and resembling them in their filthy, carrion feeding habits and wonderful powers of eyesight, and flight, have so many small peculiarities in their skeleton and anatomy that they are always made a family apart. The bill is hooked but rather slender and weak, the nostrils large, the feet with of a chicken, the wing very large, the plumage sombre, the head and neck more or less bare and the vocal organs almost wanting so that they can produce only a weak, hissing noise. The few species inhabit North and South America, and include the condors, two of the largest of flying birds. Unlike most birds of prey, the females are no larger than the males.

1. *Gypagus papa* (Linnaeus)

King Vulture

Length 815 mm. (32.00 in.); tail 255 mm. (10.00 in.).

Sexes alike.-- Adult.- Head, upper neck and middle of chest bare; an erect caruncle at base of upper mandible; feathers of lower neck. ruff. staly gray; upper back shoulders, most of outer webs of inner quills, wing coverts and remaining under parts, excepting bare skin of chest, cream color; rump and tail black. Bare skin of head and throat variously colored (red, yellow, orange and blue), but red predominating; bare skin of chest pinkish; bill black basally, red or orange terminally; iris white.

Young.- Plumage entirely blackish brown; bare skin of head and neck dusky.

So strikingly colored and marked as to be unmistakable. One in adult plumage seen soaring over the high part of Barro Colorado on April 5th, 1926, and one in young plumage in the Monkey-cap palm forest near Fort Sheman in April 1924.

2. *Catharista urubu* (Vieillot)

Black Vulture

Sexes alike.- Length 610 mm. (24.00 in.); tail 203 mm. (8.00 in.). Plumage black, the under surface of the wings with small transverse whitish patch near the tip. Head unfeathered, the bare skin blackish. Bill and feet black.

Commonly called Buzzard, like its near relative *Cathartes aura*. It is not so common or so generally distributed throughout the country as that species, but often exceeds it in numbers in the vicinity of towns and cities and along the sea coast. Aside from the difference in the color of the bare skin of the head there are differences in general conformation that are noticeable both when flying and at other times. The tail of this species is shorter than that of the Turkey Vulture and its wings are broader. Its plumage is blacker and has a small whitish patch extending across the quills a little way from the end of the wing on the under side, while the Turkey Vulture is a somewhat lighter-colored bird.

and has a large obliquely limited gray area on the under surface of the wings which are proportionately longer and narrower than in the present species and have a noticeable bend.

3. *Cathartes aura aura* (Linnaeus)

Turkey Buzzard; Turkey Vulture

Sexes alike.- Length about 760 mm. (30.00 in.); tail about 280 mm. (11.00 in.). Plumage brownish black, the head unfeathered and covered with rough red skin; under surface of wings with a large, obliquely bordered gray area. Bill whitish; feet flesh-colored.

This is a longer-tailed, narrower-winged bird than the Black Vulture (see note on that species). Extremely common throughout the Canal Zone, a few being usually in sight in the sky anywhere and at any time during daylight. Numbers may usually be seen over Ancon Hill, circling and soaring and flying before the wind. On sunny afternoons several would sit for long periods with wings extended on a large near our house. A Troupial I had in captivity in a cage on the porch was terrified every time one of these odious birds flew by, and, uttering a cry of fright, took refuge under the upturned corner of a zinc pan in the bottom of the cage. On one occasion, I saw a Summer Tanager hide in a scarlet-flowered hibiscus hedge when one lit nearby, although I never saw a buzzard attack or molest a bird.

28-29. Families FALCONIDAE and ACCIPITRIDAE

The Hawks, Eagles and Their Allies

These two families are here treated together since their members are all included in one family (Falconidae) in most books. In the classification of Miller and Wetmore, (see the Auk for July, 1926, pp. 337-346), the Falconidae include only the falcons and the genus *Polyborus* (the latter not found in the Canal Zone) the remaining forms constituting the family Accipitridae.

These birds of prey are so distinct in appearance and habits that no lengthy description is needed. Their predacious mode of life demands that they have size, strength, activity, and powers of flight superior to the creatures on which they live.

They are therefore, with comparatively few exceptions, rather large birds, some of them very large. Their colors are never brilliant, but the plumage is often handsomely variegated. The bill is short and sharply hooked at the end for use in tearing up their prey; it is provided with a tumid, soft portion called the cere at the basal part of the upper mandible. The feet which are developed into powerful talons, not the bill, are used in catching and carrying their prey.

The numerous members of these families are found in all parts of the world. It is one of the most difficult groups for the bird student, as most of the species are wary and can be seen only at some distance, usually flying, and often with the sky for

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a background, making recognition of the colors difficult. Many of the species are, moreover, quite rare and there will be few opportunities for observing them. Their colors usually vary greatly with age and sometimes also with sex, while some also have color phases independent of those factors. Their size, build, the form and proportions of their wings and tail, and manner of flight must therefore be depended upon in recognizing the species.

There are several distinct types of hawks, in one or another of which most members of the group can be placed, and it will aid in identifying a species if it can be referred to one of these types.

The falcons are small to medium sized, with pointed long wings, the courageous members of the group usually capturing their prey, which consists of birds (or in the case of very small species, of large insects), in the open, chasing and catching them by means of their superior speed, strength and endurance and ability to turn and maneuver in the air. They do not usually fly at great heights.

The Accipiter type comprises birds of rather slender build, but very active and rapacious. They range from small to rather large in size, and have short, more rounded wings and a longer tail than the falcons, giving them great maneuvering power among the branches of trees, and great speed for short distances. They commonly approach their prey rapidly or by stealth and depend on a sudden burst of speed to seize it. Familiar examples in the United States are the Sharp-shinned and Cooper's Hawks.

The Buteo type comprises medium sized and large species, having rather large broad wings, the tail usually short and rounded and a rather heavy body. They can usually soar well but are not particularly active, spending much of their time sitting quietly on some perch, often in deep woods, watching the ground for the small mammals or reptiles, which, rather than birds, form the bulk of their prey; most of them are not above feeding on dead animals if, as often happens, they can catch no living ones. The comparatively tame and easily killed species of this group, generally harmless and often useful creatures, are the usual victims of the hostility which the chicken-killing habits of the Accipiter group arouse. Familiar species of this type in the United States are the Redtailed and Red-shouldered Hawks.

The eagles are very large-sized species, most of which conform more or less to the Buteo type.

The kites medium-sized, light-bodied species with very large wings and usually quite a square tail. They have great power of long-sustained flight, ranging over the country in an irregular manner, flying usually at a moderate height and searching the ground below for their prey, which they pick up with a graceful swoop, but which consists mostly of very small creatures only. There are no familiar and common representatives in the United States; the Marsh Hawk has rather kite-like habits and flight except that it nearly always flies very low.

ACCIPITRIDAE

1. *Ibycter americanus americanus* (Boddaert)

Red-throated Caracara. Cacao

Male.- Length 495 mm. (19.50 in.); tail 235 mm. (9.20 in.). Black glossed with green, including under surface of wings; the abdomen and thighs white. Bill yellow, cere bluish black; bare skin of face throat legs red; feet black. Head slightly crested; tail long, somewhat rounded.

Female.- Similar to male but larger.

A strikingly colored, species, strictly arboreal in habits. Carriker says invariably seen in pairs. Exceedingly noisy, having, a peculiar and disagreeable cry resembling the word ca-ca-o.

2. *Milvago chimachima cordata* Bangs

Yellow-headed Caracara. Pio Pio

Milvago chimachima stone, Proc. Phila. Acad. Nat. Sci., 1918, p. 248.

Sexes alike.- Length 405 mm. (16.00 in.); tail 185 mm. (7.20 in.). Above brown excepting head and neck, the feathers of black and wing covers with ashy margins, wing quills with a conspicuous cream patch; tail two thirds buffy white barred with brown, terminally brown; head, neck all around, and under parts including under wing coverts, buffy white; a brown streak in continuation of eye. Bill ivory; bare skin yellow.

Young.- Resembling adults but sides of head to cheeks, and neck all around streaked brown and yellowish buff, the top of the head brown spotted with yellowish buff; a brown patch on ear coverts, cheeks yellowish white deepening to straw color on under parts, and streaked with brown on chest and breast, under wing coverts barred with brown. Two tufts on back of head.

A small, common South American hawk, sluggish and rather tame and stupid. A scavenger. Very common on various inlands in Panamá Bay; a nest located on the inland of Pedro Gonzalez in a rather low tree in March 1926, a female sitting on the nest. In the same tree were two or three pelicans, also nesting. One of these hawks was observed on several occasions sitting motionless on the rocks at low tide on the same island. It is primarily an open country or savannah species, and does not occur in the forest.

3. *Circus hudsonius* (Linnaeus)

Marsh Hawk

Male.- Length 480 mm. (19.00 in.); tail 230 mm. (9.00 in.). Above bluish gray, the top of the head streaked with whitish and tinged with rusty; upper tail coverts white; tail more ashen gray barred with blackish and narrowly tipped with white; breast pearl gray; abdomen white spotted or barred with

rufus; under surface of wings, a few rusty bars on under wing coverts, quills terminated with black.

Female.- Length 558 mm. (22 in.); tail 253 mm. (10.00 in.). Above dusky brown, head and neck streaked, wing coverts spotted with rufous; upper tail coverts white; tail brown, pale at tip and barred with blackish; under parts tawny buff streaked except on chin and throat with brown.

Young.- Resembling female.

A winter visitor often seen flying low over marshes, sabanas and other open places such as the Gatun Dam, Panama golf links, etc. The long wings and rambling, irregular flight, as it searches the grass and brakes for its food, often raising its wings at angle as it banks on its turns, and specially its conspicuous white rump, help in recognizing it.

4. *Micrastur melanoleucus* (Vieillot)

Black and White Hawk.

Sexes similar.- Length, male 530 mm. (21.00 in.); tail 230 mm. (9.00 in.); Female about 610 mm. (24.00 in.); tail, about 240 mm. (9.50 in.). Black above including crest, upper tail coverts tipped with white; tail black with three narrow white cross bands visible from below; sides of head, neck, a collar across hindneck, and under parts white, a narrow black patch behind ear coverts and cheeks; under wings coverts cream, under surface of quills barred black and white.

Young.- Brown above, the back and wing coverts barred with rufous tawny, a collar of rufous buff crossing hindneck; tail with tip and six cross bars, white; under parts white heavily barred with brown and washed with rufous; under wing coverts white spotted and barred with brown.

A large hawk of typical *Accipiter* build with an elongated crest. A rare species confined to forests.

5. *Micrastur guerilla interstes* Bangs

Cassin's Barred Hawk.

Length, about 355 mm. (14.00 in.); (tail, about 178 mm. (7.00 in.)).

Male.- Above blackish slate including sides of head to cheeks, the wings passing to brown; tail tipped with white and crossed by three white bars not conspicuous on under surface; throat and cheeks pale gray; remaining under parts dull white thickly and narrowly cross-barred with blackish, bars narrower and sparser on abdomen; under surface of wings barred. Bill horn, cere yellowish; feet yellow. Tail long.

Female.- Resembling male, the bars below broader and darker but similar in distribution.

Young.- Head including sides blackish; back brown with indistinct rufous bars, feathers of nape and sides

of neck elongated and spotted with buff, forming a conspicuous ruff; tail blackish with four white cross bars; under parts white excepting throat, barred with brown.

Like *M. melanoleucus*, a forest bird. It preys on smaller birds, staying near the ground. A specimen of this little hawk was seen perching quietly in an upright position on a low branch in deep forest on Barro Colorado Island in April, 1924.

6. *Geranospizias caerulescens niger* (Du Bus)

Blackish Crane Hawk.

Geranospizias neger Stone, Proc. Phila. Acad. Nat. Sci., 1918, p. 243.

Sexes alike.- Length, 480 mm. (19.00 in.); tail, 245 mm. (9.60 in.). Plumage entirely slaty black, the tail crossed by two broad white bands; under surface of wings black with a few indistinct and narrow white bars indistinguishable from a distance. Bill black; legs reddish orange.

Young.- Upper parts black, the forehead and line over eye white, the front of the crown streaked with white; chin white; remaining under parts black indistinctly striped with white, shading to buff on abdomen.

Slender, with long wings and a very long tail and legs, a small head weak bill. Sluggish in habits, and found near marshes and ponds in heavy forest. It is rare throughout its range.

7. *Accipiter bicolor* (Vieillot)

Four-banded Hawk.

Length, Male about 393 mm. (15.50 in.); tail, about 170 mm. (6.70 in.). Female larger.

Sexes alike.- Bluish slate above, the sides of head neck paler, top of head sooty; tail blackish with four narrow gray bands; below pale bluish gray, the thighs bright chestnut; under ashen coverts white, the under surface of quills ashen barred with dusky. Bill black, cere and feet yellow.

Young.- Brownish above, the feathers margined with rufous; top of head black, sides brownish streaked on cheeks with white, a white streak striped with black over eye; tail blackish with three white bands and tipped with white; under parts buffy, unmarked.

Tail long and rounded. Wings rather short and rounded, the tips of the quills spreading in flight. Flight swift, a succession of rapid flaps followed by a short sail. Rarely seen above the tree tops.

8. *Buteo platypterus platypterus* (Vieillot)

Broad-winged Hawk.

Sexes alike.- Length, about 395 mm. (15.50 in.);

tail, about 178 mm. (7.00 in.). Above dusky, the feathers somewhat margined with buffy and rufous; tail crossed by two to four bands of grayish white and tipped with whitish; chin white; chest and breast whitish, heavily barred with brownish tawny; abdomen white barred with dull rufous.

Young.- Tail grayish brown with there to five distinct blackish bars and a narrow white tip; under parts buffy white streaked with dusky, a dark streak along lower part of cheeks.

A migrant from North America, of heavy, sluggish flight but sometimes soaring. We witnessed large flocks of them on their northward migration, slowly drifting over the Radio Station at the entrance to Darien Harbor, San Miguel Bay, March 14, 1926.

9. *Asturina nitida nitida* (Latham)

Shinig Buzzard Hawk.

Sexes alike.- Length, about 405 mm. (16.00 in.); tail, about 175 mm. (6.80 in.). Ashy gray above, barred with silvery white; tail black tipped with whitish and crossed by a broad white band, the surface laper and crossed by a second narrower white band; sides of face and throat dull whitish, the remaining under parts barred gray and white, the bars diminishing in width on abdomen; under surface of wings white, the quills sparsely barred with gray. Bill black, cere and growth around bill, gray; feet yellow.

Young.- Very different, blackish brown above, feathers for the most part margined with rufous; crown buffy white streaked with blackish; forehead, sides of crown and face and under parts buffy white sparsely but heavily spotted with brown on breast, abdomen and sides; a black line over and in continuation of eye; under wing coverts tawny, under surface of quills ashy narrowly and indistinctly barred with dusky; thighs not barred. Cere yellow.

A rather stout medium sized hawk of the Buteo type, wings somewhat rounded, tail short and square. Arboreal and somewhat inactive in habits, feeding chiefly on small mammals, insects and lizards. Seen at Pearl Islands, March, 1926.

10. *Rupornis magnirostris ruficauda* (Sclater and Salvin)

Large-billed Hawk.

Sexes alike.- Length, about 370 mm. (14.50 in.); tail, about 150 mm. (5.90 in.). Above brownish ashen, the feathers with paler margins except on head; inner margins of wings quills deep chestnut barred with black; tail chestnut with four or five black bars, the upper tail coverts barred buff and brown; throat and chest brownish ashen, the throat streaked with buff; remaining under parts barred grayish chestnut and white; under surface of wings buffy, the under wing coverts speckled and the quills barred with dusky. Bill black, cere and feet yellow.

Young.- Similar but less shaded with ashen and obscurely barred above with tawny; more bars on tail.

Typical Buteo build, tail conspicuously rufous. Its prey are snakes, lizards and mice. One of the commonest hawks of the Zone; found on the edge of the forest or in second growth,

11. *Busarellus nigricollis nigricollis* (Latham)

Black-collared Hawk. "cuello negro indio viejo"

Male.- Length, about 455 mm. (18.00 in.); tail, about 190 mm. (7.50 in.). Above bright chestnut finely striped with black, head and neck creamy buff, the crown washed with chestnut and narrowly striped with black; the longer outer wing quills terminated with black; tail chestnut crossed by black bands and black terminally tipped with white; lower throat conspicuously black; remaining under wing coverts chestnut. Bill black; feet yellow.

Female.- Length, about 558 mm. (22 in.); tail, about 203 mm. (8.00 in.). Similar to male but larger.

Young.- Above chestnut irregularly barred with dusky; below variegated brown and chestnut.

A fish-eating hawk, with broad wings and a short tail resembling the osprey. *Pandion haliaëtus* in flight. Very sluggish, tame and stupid; found only along swampy river banks and in marshes. Its chestnut coloration and light buff head and neck render it absolutely unmistakable in life.

12. *Buteogallus anthracina nathracina* (Nitzsch)

Mexican Black Hawk.

Sexes alike.- Length, about 595 mm. (23.50 in.); tail, about 230 mm. 9.00 in.). General color of plumage black, the tail tipped with white and crossed by one broad white band; upper tail coverts narrowly tipped with white; surface of wings black. Bill blue black; bare skin of face, cere, and feet yellow.

Young.- Dusky above, back black; head neck all around and under parts whitish broadly streaked with black and washed with tawny.

A large heavily built hawk of sluggish habits. Not at all shy. It is not uncommon near the coast and about the islands of Panama Bay and along the larger rivers.

13. *Leucopternis ghiesbreghtii costaricensis*
Sclater

Ghiesbrecht's Hawk.

Leucopternis ghiesbreghtii Stone, Proc. Phila. Acad. Nat. Sci., 1918, p. 250.

Sexes alike.- Length, about 585 mm. (23.00 in.);

tail, about 215 mm. (8.50 in.). General color of plumage white, tail with a subterminal band of black; wings black and white. Bill black, cere gray; feet yellow.

Young.- Similar to adults but the top of the head striped with black.

This beautiful white ^{hawk} of typical Buteo build, is a bird of the deep forest, perching on high trees where it is shaded and concealed from view. It has a loud, shrill, prolonged screech, several times repeated, which it utters both when flying and perching. An adult was seen sitting on an upper branch, crossing the tail, of a high tree near the Monkey-cap palm grove, in April, 1924. One was seen twice at Barro Colorado Islands, each time with a snake held by the neck in its claws, on April 3 and April 4, 1926.

14. *Thrasaëtus harpyia* (Linnaeus)

Harpy Eagle

Sexes alike.- Length, 965 mm. (38.00 in.); tail, 405 mm. (16.00 in.). Head and neck all around ashen gray; remaining upper parts and chest brownish black; tail mottled ashen and dusky crossed by four imperfect black bands tipped with white; remaining under parts white with the feathers of under tail coverts elongated and plume-like. Bill black; feet yellow.

Young.- Above ash gray marbled with black; tail with about five broken black bands; head, neck, and under parts white, the larger crest feathers and chest tinged with ash-gray; under surface of wings ashy barred with black.

A magnificent eagle with a conspicuously long crest and a frill on center of hindneck. Its wing spread about seven feet, flight sluggish and heavy. Kills prey as large as sloths, pigs and fawns. Seen over Monkey-cap palm grove near Fort Sherman, on May, 1924; it lit on the topmost branch of a tall tree.

15. *Herpetotheres cachinnans cachinnans* (Linnaeus)

Laughing Hawk (Guacabó)

Sexes alike.- Length, about 480 mm. (19.00 in.); tail, about 230 mm. (9.00 in.). Brown above, the slightly crested head and neck buffy white, finely streaked with black; sides of head to front part of cheeks black; front part of cheeks, a patch under the eye, a collar around the neck, and under parts, white; upper tail coverts buff; wing quills brown and rufous barred with black; tail brown crossed by four bands of whitish buff. Bill grayish black; cere orange; feet yellowish.

A conspicuously marked hawk, its prey principally reptiles. It is particularly fond of perching on the top of a tall dead tree in some clearing in the forest, and has a strange cry, loud and far reaching. Doctor Frank M. Campman says, "Resembling a call of a man in great pain and ending in an agonized wail." "The guttural laugh which precedes the long call of this species can be heard only a

short distance." (Richmond.)

16. *Elanoides forficatus yetapa* Bonn and Vieillot

Swallow-tailed Kite

Elanoides forficatus Stone, Proc. Phila. Acad. Nat. Sci., 1918, p. 250.

Sexes alike.- Length, about 535 mm. (21.00 in.); tail, 330 mm. about, (13.00 in.). Tail cleft more than one its length. Head, neck all around, rump, and under parts, including under wing surface, immaculate white, black, wings and tail black glossed with green and purplish. Bill black; light grayish blue.

17. *Chondrohierax unciniatus* (Temminck)

Red-collared Hawk.

Leptodon unciniatus Stone, Proc. Phila. Acad. Nat. Sci., 1918, p. 250.

Sexes similar.- Length, male about 407 mm. (16.00 in.); female about 431 mm. (17.000 in.); tail, (both sexes) about 190 mm. (7.50 in.). General color bluish slate, brown below and with narrow and irregular bars of white; tail white crossed by two broad black bars; under surface of wings barred. Bill black; cere and bare skin of face yellow

First mature plumage.- Slate replaced by brown except on head; under parts more broadly barred tawny brown and white.

Another Phase of plumage.- The brown below replaced by dark brown.

Another phase.- General color blackish gray, the basal half of tail white.

Young.- Brown above, a white collar crossing hindneck, tail with three cream and ashy bands and tipped with whitish; under parts buffy white including under wing coverts; under surface of quills barred.

A tame and sluggish hawk. Its flight is heavy and flapping. Found in open swamps and marshes.

18. *Ictinia plumbea* (Gmelin)

Plumbeous Kite. "Gavilán Azul"

Sexes alike.- Length, 355 mm. (14.00 in.); tail, 152 mm. (6.00 in.). General color lead gray shading to clackish on tail, and distinctly paler on head; with three white bands (two visible from below); tips and outer webs of wing quills lead gray, inner webs chestnut (conspicuous in flight); feathers surrounding eye black, Bill black.

Young.- Blacksh above, the feathers tipped with white; head, neck and lower parts whitish striped with blackish; under surface of wings blackish barred with white, but indistinctly on under wing coverts.

A small hawk with large and long pointed wings and a moderately long square-tipped tail. A common and widely distributed species which occurs in all parts of the Canal Zone. Of swift and graceful flight, it is sometimes seen at a considerable height and at other times flying close to the ground.

FALCONIDAE

19. *Falco peregrinus anatum* (Bonaparte)

Duck Kawk

Length.- Male, 405 mm. (16.00 in.); tail, 165 mm. (6.50 in.). Female, 480 mm. (19.00 in.); tail, 190 mm. (7.50 in.).

Sexes alike.- Above dark bluish, slaty outer wing quills barred with tawny; tail inconspicuously barred with blackish and tipped with white; a black patch from bill extending down sides of throat; below cream buff barred and spotted with black except on throat and chest.

Young.- Above dusky with rusty edges to feathers; ear coverts buffy; below buffy streaked with black; bars of under surface of tail tawny buff.

This bird, a subspecies of the Peregrine Falcon formerly used for hawking in the Old World, has an amazingly swift. It preys on game, shore birds and other birds. Large falcons apparently of this species have been seen at several places in the Zone, but specially at the Pacific canal entrance. On April 11th, 1926, one was seen to chase and dive six or eight times at a turkey buzzard. (*Cathartes aura*), for what purpose I do not know, unless for diversion. The buzzard apparently had no difficulty in avoiding its attacks, though made very swiftly from a great height, by turning and side slippings at the last instant.

20. *Falco albigularis* Daudin

White-throated Bat Falcon

Length.- Male, about 228 mm. (9.00 in.); tail, about 102 mm. (4.00 in.). Female, about 305 mm. (12.00 in.); tail, 137 mm. (5.40 in.).

Sexes alike.- Above slaty black; wing quills barred with white on inner web; tail black crossed by four of the narrow indistinct grayish bands; sides of neck white slightly tinged with rufous; breast and sides black finely barred with white; remaining under parts chestnut; under surface of wings brown inconspicuously barred with white. Bill black; cere and feet yellow.

Small and of typical falcon build and flight. It frequents clearings in the forest and perches on branches whence it darts after its prey, consisting of birds, grasshoppers, etc. Its cry resembles that of the Killdeer Plover (*Oxyechus vociferus*).

21. *Falco columbarius* (Linnaeus)

Pigeon Kawk.

Length. 290 mm. (11.50 in.); tail, 140 mm. (5.50 in.).

Male.- Slaty bluish gray above, long outer wing quills barred with white; a rusty collar across hindneck; chin, throat and sides of neck white; tail with three or four grayish bands and white tip; under parts buff washed with tawny and streaked with blackish.

Female.- Resembling male but as in young more buffy or whistish below.

Young.- Above dusky, a broken buffy collar across hind neck; long outer wing quills barred with tawny; tail black tipped with whitish and crossed by broken buffy bars; below, similar to adults.

Migratory. A small and bold falcon frequenting open country.

22. *Cerchneis sparveria* (Linnaeus)

Sparrow Hawk

Length, 255 mm. (10.00 in.); tail, 120 mm. (4.80 in.).

Male.- Black rufous, more or less incompletely barred with black; tail rufous with a subterminal band of black and tipped with white; top of head slaty blue with probably a rufous patch on crown; sides of head with two vertical narrow black bands, the enclosed spaces covering part of cheeks and whitish ear coverts; wing coverts slaty blue spotted with black; under parts cream tinged with tawny on breast and abdomen and spotted on abdomen and sides with black. Feet cere orange yellow.

Female.- Resembling male but wing coverts rufous and with black and tail distinctly barred with black; under parts cream streaked with tawny.

Young.- Resembling adults but colors more blended. All feet yellow, cere yellow.

A common winter visitant. It frequents open places, and is often seen perched on telegraph poles along roadsides. Notes, a long drawn-out shrill repetition of killy killy. It has one habit by which it may often be recognized, that is of hovering in the air without moving forward, but keeping up rapid beats of its wings.

23. *Pandion haliaëtus carolinensis* (Gmelin)

Osprey

Length. 586 mm. (23.10 in.); tail, 215 mm. (8.40 in.).

Sexes similar.- Above dusky, the tail grayer tipped with white and crossed by six or seven dusky bands; head, neck, and lower parts white, a conspicuous dusky streak through eye and ear coverts, breast sometimes spotted with brown, (never immaculate in female).

Young.- Resembling adults but feathers above tipped with white.

The osprey feeds entirely on fish, flying above the waterfront and plunging after its prey, which it seizes in its talons. Notes, a succession of high, petulant whistles. Common in the Canal Zone. Found of soaring at a considerable height. The snowy white under parts and dark wings and a noticeable bend in each wing when sailing, due to the quills being held directed slightly backward instead of fully outstretched, make it easy to recognize.