

# Herpailurus yagouaroundi.

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## *Herpailurus Severtzow, 1858*

*Herpailurus* Severtzow, 1858:385, 390. Type species *Felis yagouaroundi* É. Geoffroy, 1803 by monotypy (subgenus elevated to genus by Pocock, 1917:346).

**CONTEXT AND CONTENT.** Order Carnivora, Suborder Feliformia, Superfamily Feloidae, Family Felidae, Subfamily Felinae. The genus *Herpailurus* contains one species. There is no agreement on whether *Herpailurus* is a true genus or a subgenus of *Felis* (Cabrera, 1957; Ewer, 1973; Hall, 1981; Hemmer, 1978; Leyhausen, 1979; Salles, 1992; Wozencraft, 1993). Kitchener (1991) and Nowak (1992) provide a systematic table and Salles (1992) a series of cladograms of the different opinions regarding the taxonomy of the Felidae.

## *Herpailurus yagouaroundi* (É. Geoffroy, 1803)

### Jaguarundi

*Felis yagouaroundi* É. Geoffroy, 1803:124. Type locality "L'Amérique méridionale," restricted by Hershkovitz 1951: 565 to "Cayenne, French Guiana" (based upon "yagouaroundi" of Azara, 1801:171–176).

*Felis eyra* Fischer, 1814:228. Type locality "Paraguay" (based upon "eyra" of Azara, 1801:177–178, for the red phase).

*Felis jaguarondi* Fischer, 1814:228. Renaming of *Felis yagouaroundi* É. Geoffroy, 1803.

*Felis unicolor* Trail, 1819:170. Type locality "Demerary, Guyana."

*Felis darwini* Martin, 1837:3. Type locality "Buenos Ayres, Argentina" (based upon the skin of an immature specimen, gray phase).

*Felis cacomitli* Berlandier, 1859:12. Type locality "Matamoros, Tamaulipas, Mexico."

*Felis ameghinoi* Holmberg, 1898:485. Type locality "San Luis, Argentina."

*Felis apache* Mearns, 1901:150. Type locality "Matamoros, Tamaulipas, Mexico."

*Felis fossata* Mearns, 1901:150. Type locality "Mérida, Yucatán, Mexico."

*Felis panamensis* Allen, 1904:71. Type locality "Boquerón, Chiriquí, Panamá."

**CONTEXT AND CONTENT.** Context as noted in generic account above. Eight subspecies are recognized (Cabrera, 1957; Hall, 1981):

*H. y. ameghinoi* (Holmberg, 1898:485), see above.

*H. y. cacomitli* (Berlandier, 1859:12), see above (includes *apache*).

*H. y. eyra* (Fischer, 1814:228), see above (includes *darwini*).

*H. y. fossata* (Mearns, 1901:150), see above.

*H. y. melantho* (Thomas, 1914:350). Type locality "Pozuzo, Huánuco, Peru (altitude 800 m)."

*H. y. panamensis* (Allen, 1904:71), see above.

*H. y. tolteca* (Thomas, 1898:41). Type locality "Tatemales, Sinaloa, Mexico."

*H. y. yagouaroundi* (É. Geoffroy, 1803:124). See above (includes *jaguarondi*, *unicolor*).

**DIAGNOSIS.** The jaguarundi differs from the flat-headed cat (*Prionailurus planiceps*), its closest relative in appearance, as follows: *H. yagouaroundi* has a longer head and body length of 633.6 mm (range, 488–832,  $n = 80$ ), compared with 560 mm (410–610); proportionately longer tail, 422.3 mm (275–590,  $n = 80$ ), compared with 180 mm (130–200); and greater body mass of 5.1 kg (3–7.6,  $n = 28$ ), compared with 1.5–2.2 kg. In addition, dark lines are absent on the cheeks of the jaguarundi, but are present on the flat-

headed cat (Guggisberg, 1975; Kitchener, 1991; Oliveira, in press). From the other smaller species of Neotropical felids of the genera *Leopardus*, *Lynchailurus*, and *Oerailurus*, the jaguarundi is distinguished by its elongate body, small rounded ears, short limbs (relative to head and body length), and uniform unspotted (at any age) polymorphic pelage (Cabrera, 1961; Guggisberg, 1975; Nowak, 1992; Oliveira, in press). The jaguarundi also lacks the rounded contours of the head (which tends to be long in proportion to the body), so characteristic of the other small Neotropical felids (Eisenberg, 1989). The long cranium, which is never convex longitudinally, the possible presence of the P2, and the notably narrower auditory bullae also are diagnostic (Hall, 1981). The blackish-brown color phase can be mistaken for the mustelid *Eira barbara* (tayra). The latter, however, always has a distinct irregular ochre-yellow or orange-yellow spot on the throat, which is lacking in the jaguarundi (Husson, 1978).

**GENERAL CHARACTERS.** *Herpailurus yagouaroundi* is a small to medium-sized animal considered to be the cat with relatively few feline features (Guggisberg, 1975). The head is flat, elongate, and low, the ears are small and rounded, and the limbs are proportionally shorter relative to the length of the body (Azara, 1801, 1802; Cabrera, 1961; Hall, 1981; Oliveira, in press; Oliveira and Cassaro, 1997; Fig. 1). The tail is about two-thirds the length of head and body (Oliveira, 1994). Of the assemblage of small Neotropical felids, only ocelots (*Leopardus pardalis*) are larger than jaguarundis. Total length of adults in Venezuela is 1,141 mm (range 1,010–1,380 mm,  $n = 5$ ) for males, and 941.4 mm (range 920–1,025 mm,  $n = 5$ ) for females (Mondolfi, 1986). Mean measurements (in mm and kg) with range and sample size in parentheses for individuals from Texas, Mexico, Belize, and Honduras are as follows: length of head and body, 683 (620–832,  $n = 7$ ) for males, 590.1 (430–660,  $n = 12$ ) for females; length of tail, 504 (430–572,  $n = 7$ ) for males, 438.2 (400–506,  $n = 12$ ) for females; and average body mass for both sexes combined is 5.1 (3.75–6.25,  $n = 4$ ). In northern South America (Colombia, Venezuela, Guyana, Suriname) length of head and body averages 619.3 (574–680,  $n = 3$ ) for males, 617.3 (533–735,  $n = 3$ ) for females; length of tail, 431.7 (408–470,  $n = 3$ ) and 438.3 (368–515,  $n = 3$ ); and body mass of both sexes combined is 4.6 (3.2–7.0,  $n = 3$ ). For male specimens from Brazil, length of head and body averages 659.3 (555–750,  $n = 18$ ), length of tail, 439.8 (310–590,  $n = 18$ ), and body mass, 5.6 (3.0–7.6,  $n = 13$ ). For females, length of head and body averages 597.4 (488–668,  $n = 11$ ), length of tail, 391.8 (275–475,  $n = 11$ ), and body mass, 4.5 (3.5–5.4,  $n = 8$ )—Oliveira, 1994, in press).

The narrow and low skull has a short facial area, inconspicuous zygomatic arches, a temporal crest usually apart and forming

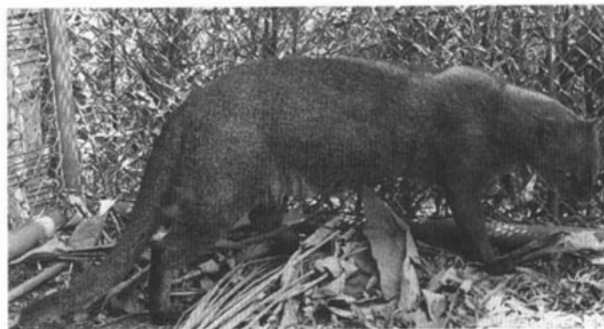


FIG. 1. Adult female *Herpailurus yagouaroundi eyra* from São Paulo, Brazil.

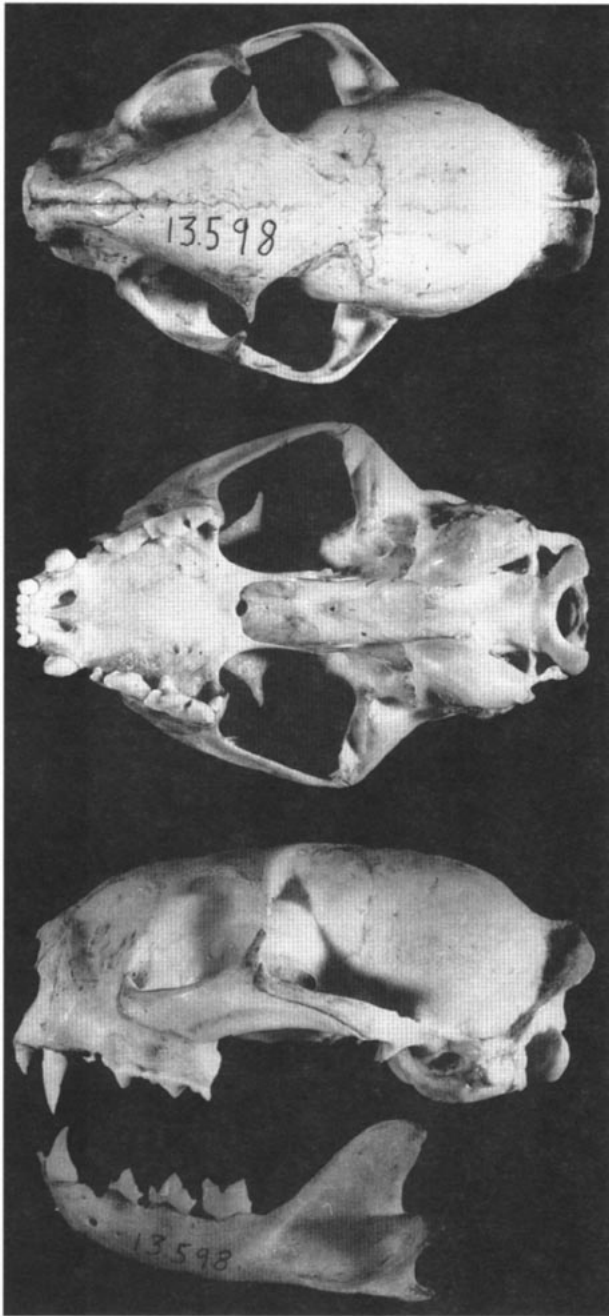


FIG. 2. Dorsal, ventral, and lateral views of cranium and lateral view of mandible of a female *Herpailurus yagouaroundi yagouaroundi*. Museu de Zoologia da Universidade de São Paulo 13598, from Fordlândia (03°47'S, 55°28'W) state of Pará, Brazil. Greatest length of cranium is 116.1 mm. Photograph by Fernando T. de Andrade.

a lyriiform area that occupies the anterior three-fourths of the braincase, a sagittal crest that is rarely complete, and an occipital crest only slightly concave above the condyles (Cabrera, 1961; Hall, 1981; Fig. 2). The sagittal crest is restricted to the posterior quarter of the braincase (Husson, 1978). The braincase is enlarged and convex, giving the interorbital region an elevated appearance, and its narrowest part is situated behind the nasomaxillary line; the interorbital region is situated forward. The muzzle is compressed above (Cabrera, 1961; Hall, 1981). The nasals are triangular produced in the inner part of their anterior margins, obscuring the foramina incisiva when viewed from above (Husson, 1978). The maxilla is rounded, with a nearly horizontal upper edge and an almost vertical anterior border. The mandible is robust (Cabrera, 1961; Hall, 1981). The permanent dental formula is  $i\ 3/3, c\ 1/1,$

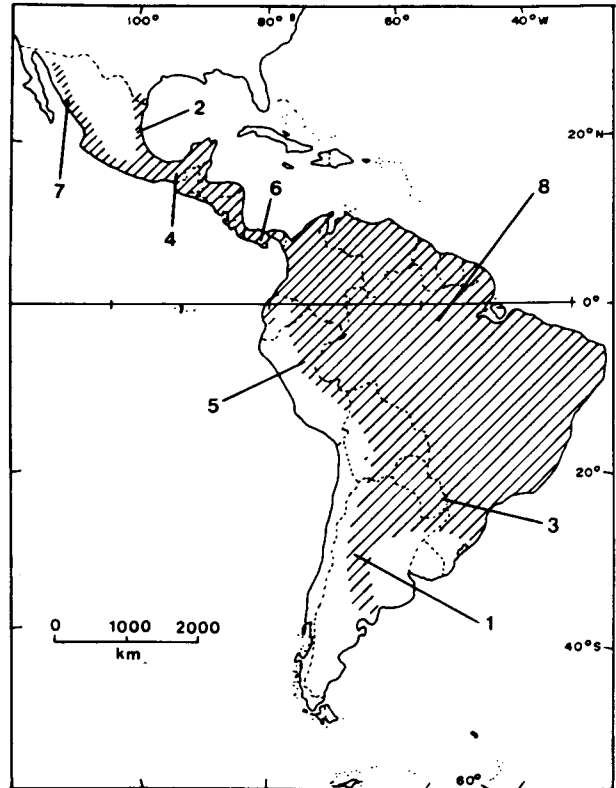


FIG. 3. Geographic distribution of *Herpailurus yagouaroundi*: 1, *H. y. ameghinoi*; 2, *H. y. cacomitli*; 3, *H. y. eyra*; 4, *H. y. fossata*; 5, *H. y. melantho*; 6, *H. y. panamensis*; 7, *H. y. tolteca*; 8, *H. y. yagouaroundi*. Adapted from Oliveira (1994).

$p\ 3/2, m\ 1/1,$  total 30 (Husson, 1978). Range of skull measurements (in mm) of North and Central American specimens combined are as follows: greatest length of skull, 89.3–115.5; zygomatic breadth, 60.0–74.5; and crown length of maxillary tooth row, 27.5–32.5 (Hall, 1981). The following cranial measurements (in mm) of 23 individuals are from a sample representing adult specimens from Brazil (mean and range, in parentheses): greatest length of skull, 95.0 (86.7–116.1); condylobasal length, 94.5 (81.2–109.2); length of palate, 37.4 (33.4–41.6); zygomatic breadth, 61.5 (55.6–72.7); interorbital breadth, 17.0 (13.3–20.8); width of postorbital process, 40.8 (34.1–44.4); postorbital constriction, 29.8 (27.2–33.6); width of braincase, 44.4 (40.3–48.5); length of upper tooth row (C-M1), 29.8 (26.2–33.2); and length of P4, 12.0 (10.5–14.5; Oliveira, in litt.).

The jaguarundi has a dark phase (brownish-black), a gray phase, and a reddish-yellow phase. All phases have varying degrees of shading (Oliveira, 1994, in press; Oliveira and Cassaro, 1997). However, most authors consider only two color phases, a grayish-black and a reddish-brown (Cabrera, 1961; Eisenberg, 1989; Hall, 1981; Kitchener, 1991; Leopold, 1959). Different color phases can be found in the same litter (Cabrera and Yeppe, 1960). The coloration is uniform on the whole body, sometimes with the head and ventral side of the neck slightly lighter. The hairs tend to be light on the base and on the tip, which gives some animals a grizzled appearance. Some specimens show a broad black median dorsal band (Husson, 1978; Oliveira, in press).

**DISTRIBUTION.** *Herpailurus yagouaroundi* has a broad geographic distribution, ranging from southern Texas, to the eastern and western lowlands of Mexico, through the inter-Andean valley of Peru, to southern Brazil and Paraguay, to the provinces of Buenos Aires and Rio Negro (approximately 39°S) in Argentina (Cabrera, 1957; Guggisberg, 1975; Hall, 1981; Tewes and Schmidly, 1987; Ximenez, 1972; Fig. 3). Jaguarundis also have been reported from Arizona (Little, 1938). However, this cat is not known to be a resident in that state (Nowak, 1992), and there is no recent evidence of the presence of jaguarundis in Texas (Tewes and Everett, 1986).

There were a few sightings and one capture of a young jaguarundi in Florida (Neil, 1961; Ray, 1964). At present, a small population may be established in Florida as a result of human introduction (Nowak, 1992; Ray, 1964). In other southeastern states there are sporadic reports of a jaguarundi like-felid (Nowak, 1992). The species ranges from sea level to at least 3,200 m (Cuervo et al., 1986).

**FOSSIL RECORD.** There is a controversy regarding fossil jaguarundis. Originally the species was reported from four late Rancholabrean faunas in Florida and Georgia (Dalquest et al., 1969; Ray, 1964, 1967). However, these specimens also were referred to variously as a new species (*Felis amnicola* Gillette, 1976) or an extinct subspecies of the margay (*Leopardus wiedii amnicola* Werdelin, 1985). Another specimen from Port Kennedy Cave, Pennsylvania, previously referred to as an early representative of the jaguarundi line, probably represents a new species (Werdelin, 1985). Fossilized jaguarundi remains have been found from the late Rancholabrean of Mexico (San Josecito Cave) and Texas (Schultze Cave—Kurtén and Anderson, 1980). Mandibles of the jaguarundi and margay differ in the postdental portion of the lower jaw. The coronoid process is broader and has the anterior border steeply ascending in the former, whereas in the latter the coronoid process is narrow and curving. Additionally, *H. yagouaroundi* has a deeper coronoid fossa with an associated lingual bulge lacking in *L. wiedii* (Ray, 1964).

**FORM AND FUNCTION.** The body shape and color suggests that jaguarundis are mainly terrestrial (Ricciuti, 1979), but they take refuge and move about in trees with great agility, especially when pursued (McCarthy, 1992; Oliveira, 1994; Rengger, 1830).

The vertebral column is long and slender. It consists of 7 C, 13 T, 7 L, 3 S, and 20 Ca, total 50. The first 10 ribs are vertebrosteral and the 11th, 12th, and 13th are vertebrocostal. The baculum is truncated and reduced (Ewer, 1973).

The jaguarundi was considered identical, functionally, to the margay based on the relative maximum gape ( $52 \pm 5.2$  mm) and jaw length (51.8 mm), characters supposedly related to capture of prey (Kiltie, 1984, 1988). An emphasis on "craniomandibular" and "functionally" has been stressed on the basis that jaguarundis are bigger and heavier than margays (634 mm in length and 5.1 kg, as opposed to 545 mm and 3.4 kg—Oliveira, 1994, in press). However, canines are longer in margays (10.89 mm) than in jaguarundis (9.71 mm—Van Valkenburgh and Ruff, 1987). If the length of the lower canines of margays and jaguarundis differ in a manner similar to that of the upper canines, then the gape of a jaguarundi is 1.092 times that of a margay (Dayan et al., 1990). The relative maximum bite force was reported as  $611 \pm 184$  mm<sup>2</sup> (Kiltie, 1984).

The eyes are honey-brown and the pupils are rounded when contracted (Azara, 1801; Oliveira, 1994, in press; Ricciuti, 1979). The upper limit of hearing is 100 kHz; however, the relative and absolute upper useful limits are 55 and 70 kHz (Ewer, 1973). Adult jaguarundis have a broad range of vocalizations, including 13 distinctive calls (Hulley, 1976). Studies with diets of dead and live chicks suggest that digestibility is more efficient when animals are fed live animals (Paula, 1996).

**ONTOGENY AND REPRODUCTION.** The average length of the estrus period is  $3.2 \pm 0.8$  days ( $n = 6$ ). The estrous cycle lasts  $53.6 \pm 2.4$  days ( $n = 8$ —Mellen, 1993). Gestation has been reported to last from 72 to 75 days (Hulley, 1976) and from 63 to 70 days (Nowak, 1992). Litter size varies from one to four (Green, 1991; Guggisberg, 1975; Leopold, 1959), with a mean litter size ( $n = 27$ ) of 1.9 (Oliveira, 1994). Females have three pairs of nipples (Azara, 1802). Sex ratio of 12 litters was 9:4:9 (males: females: unknown—Mellen, 1993). Young start leaving the nest at 28 days (Green, 1991). Between 21 and 30 days females gave small amounts of food to their cubs, and at 42 days young were capable of eating by themselves (Hulley, 1976). Females attain sexual maturity at 1.6 years of age (Mellen, 1993). However, signs of maturity were reported for two females 2 to 3 years of age (Hulley, 1976). The number of young potentially produced by a 7-year-old female in her lifetime is nine (Oliveira, 1994). The reproductive period has been reported to be year-round in the tropics (Ewer, 1973; Weigel, 1975), whereas there are two periods in Mexico (Guggisberg, 1975; Leopold, 1959), and a late-autumn period in the northern part of its range (Bailey, 1905). Fallen logs, dense thickets, and

hollow trees are used as den sites (Cabrera and Yeppe, 1960; Guggisberg, 1975).

**ECOLOGY.** As its extensive geographical distribution suggests, *H. yagouaroundi* is found in a variety of habitats. Jaguarundis have been reported from tropical rainforests, tropical deciduous and semideciduous forests, subtropical forests, tropical thorny forests, dry and humid premontane forests, rainy subalpine Andean scrub (paramo), palmetto thickets, scrub savannas, wet-swampy savannas, swampy grasslands, semiarid thorn scrubs, dense chaparral, and Monte (scrub) desert (Bisbal, 1989; Guggisberg, 1975; Mondolfi, 1986; Peterson and Pine, 1982; Schaller, 1983; Tewes and Everett, 1986; Willig and Mares, 1989; Zapata, 1982). Their habitat in Paraguay consists of forest edges, thickets, and hedge-like strips of scrub intermingled with spiny bromeliads (Rengger, 1830). This species occurs most frequently in oldfield habitats in Belize, although much of their home range encompasses older successional and primary forests (Konecny, 1989). Jaguarundis may be found close to streams (Guggisberg, 1975; Konecny, 1989), and edges of forest, dense brush, and shrubbery. They rarely are found deep in the woods (especially rainforests), but often are found in open areas near cover (Mondolfi, 1986; Nowell and Jackson, 1996). Apparently, access to dense ground vegetation determines habitat suitability. Jaguarundis are considered the felid most characteristic of the Cerrado (savanna) ecosystem and the small Neotropical cat with the highest habitat flexibility (Nowell and Jackson, 1996; Oliveira, 1994).

Home ranges of radiotagged jaguarundis were huge and varied considerably in Belize (99.9 and 88.3 km<sup>2</sup> for two adult males, and 20.1 km<sup>2</sup> for an adult female—Konecny, 1989). In southern Brazil, home ranges of an adult male and an adult female were 17.6 and 6.8 km<sup>2</sup>, respectively (Crawshaw, 1995).

The diet consists mainly of small rodents, birds, and reptiles. Small-sized deer (*Mazama*) also have been taken (Cabrera and Yeppe, 1960; Leopold, 1959), but this could have been carrion. More than 26 vertebrate items have been listed (Oliveira, 1994). In Belize, the diet consists of 83.4% mammals, and 16.6% birds (Konecny, 1989). In Venezuela, lizards (32.2–35.3%) and birds (29.0–41.2%) are the most common items (Bisbal, 1986; Mondolfi, 1986). However, by volume, mammals are the most common item in Venezuela, comprising 46% of the total (Bisbal, 1986). Nevertheless, birds have been cited as the most common food item (Cabrera and Yeppe, 1960; Leopold, 1959) and jaguarundis are known to prey on poultry throughout most of their range (IUCN/SSC/CBSG, 1994; Oliveira, 1994). In Brazil, prey includes gray short-tailed opossums (*Monodelphis domestica*), tufted-ear marmosets (*Callithrix jacchus*), cavies (*Cavia aperea*, *Galea spixii*), rock cavies (*Kerodon rupestris*), birds (tinamou and doves), teid lizards, and a characid fish (*Astyanax bimaculatus*—Manzani and Monteiro-Filho, 1989; Olmos, 1993; Ximenez, 1982). Although arthropods and vegetation (leaves and fruits) are frequently found in fecal droppings from Belize (71.7 and 17.3%, respectively) they are not common food sources (Konecny, 1989). The standardized breadth of diet of jaguarundis varies from 0.37 in Belize to 0.68 and 0.85 in Venezuela. The mean mass of vertebrate prey per day is 400 g (range, 192–606). Of the small tropical species of Neotropical felids, the mean mass of vertebrate prey of jaguarundis is second only to the ocelot's (Oliveira, 1994). In captivity, average daily consumption for diets consisting of meat (dead and live chicks) was 405 g, whereas the daily amount defecated was 58 g (Paula, 1996). Densities of 0.25 and 0.8 animals/km<sup>2</sup> were reported for the llanos of Venezuela (Eisenberg et al., 1979), 0.015 for the Pantanal of Brazil (Schaller, 1983), and 0.25–0.8 individuals/km<sup>2</sup> for Costa Rica (Vaughan, 1983).

Parasites reported for the jaguarundi include hookworms—*Ancylostoma tubaeforme*, *A. pleuridentatum* (Díaz-Ungria, 1964; McClure, 1933; Thatcher, 1971); tapeworms—*Toxocara cati* (Díaz-Ungria, 1964), *Spirometra gracilis*, *S. longicollis*, *S. mansonioides* (Schmidt and Martin, 1978), *Echinococcus oligarthrus* (Cameron, 1926; D'Alessandro et al., 1981; Thatcher and Souza, 1966); and the trematode lung fluke (*Paragonimus*). Also reported are acanthocephalans—*Oncicola paracampanulata*, *O. onicola* (Machado, 1963; Travassos, 1917), *Molineus felineus* (Díaz-Ungria, 1964), and *Toxoplasma gondii* (Jewell et al., 1972). Causes of mortality of captive jaguarundis in Brazil ( $n = 24$ ) were diseases of the respiratory system (29.2%, especially pneumonia), disorders of the urogenital system (20.8%), and diseases of the cardiovascular sys-

tem and disorders of the digestive system (8.3% each). Other causes, such as cancer, choking, and poisoning accounted for 29.2% (Oliveira, in litt.). In captivity, jaguarundis live up to 15 years (Prator et al., 1988).

In a small, sympatric felid assemblage in Belize, jaguarundis are diurnal, thus showing temporal segregation with ocelots and margays. Jaguarundis are more terrestrial and are found more frequently in oldfield habitats than are margays (Konecny, 1989).

The mean area necessary to support a viable population is 3,521 km<sup>2</sup> (Oliveira, 1994). Additional calculations show that the maximum possible number of conservation units within the jaguarundi's range that could possibly maintain a viable population, based on the species area requirement, is 38 (Oliveira, 1994). The area of jaguarundi's range protected was estimated at 3–6% (Nowell and Jackson, 1996). Besides habitat loss, hunting to protect poultry is considered to have the highest negative impact on jaguarundis (Bisbal, 1992; Oliveira, 1994).

**BEHAVIOR.** It has been suggested that *H. yagouaroundi* is nocturnally active, but daytime activity also occurs (Cabrera and Yepes, 1960; Hall, 1981; Leopold, 1959; Mondolfi, 1986; Tewes and Schmidly, 1987). Overall, jaguarundis are less nocturnal than most cats, hunting mainly in the morning and evening (Guggisberg, 1975). Jaguarundis are mainly diurnally active, according to a telemetric study in Belize, although they show movement at all hours. Activity peaks between 1400 and 1600 h, and the mean distance moved/hour was 253 m (90 m/h at night and 277 m/h during the day—Konecny, 1989). In southern Brazil, consecutive locations of radiotagged animals were predominantly <1 km apart for a male and equally <1 km apart and 1–2 km for a female (Crawshaw, 1995). It has been suggested that coat color and body shape indicate that jaguarundis are more diurnal and hunt more terrestrially than spotted cats (Guggisberg, 1975; Kiltie, 1984; Konecny, 1989; Ricciuti, 1979).

*Herpailurus yagouaroundi* is solitary (Guggisberg, 1975), but there are suggestions that it lives in pairs (Cabrera and Yepes, 1960). Captive specimens display some gregarious behavior (Hulley, 1976). Jaguarundis have the friendly close-range vocalizations found in most small cats, the "gurren" (gurgle), which is a short, noisy, low-intensity sound with rhythmic amplitude modulation, used for friendly close contact, courtship, mating, and for communication between females and young (Peters, 1984).

The following scent-marking patterns for jaguarundis have been recorded: urine spraying (male), scraping, head rubbing, claw raking, and recumbent head rubbing (Wemmer and Scow, 1977). Several marking behaviors have been recorded for captive jaguarundis: neck rubbing, sharpening claw, Flehmen, scraping with hind feet for both males and females, and cheek rubbing and urine spraying by males (Mellen, 1993).

During reproductive receptivity, the female rolls on her back and deposits urine in various places while giving faint cries. The female screams loudly while mating and the male gently bites the female's neck (Hulley, 1976). The following social behaviors have been recorded for male and female jaguarundis: hiss, growl, social groom, social sniff, approach, chase, and face off; anogenital sniff, follow, and displace have been described only for males, whereas strike with paw, bite, and social head rub were reported only for females (Mellen, 1993). Jaguarundis are easily tamed, becoming good pets (Cabrera and Yepes, 1960; Guggisberg, 1975).

**GENETICS.** The jaguarundi, like the majority of felids, has 19 pairs of chromosomes (2n = 38), but its karyotype is distinctive. Jaguarundis have FN = 76, with 36 pairs of metacentric or submetacentric autosomes. The X chromosome is medium-sized and submetacentric, whereas the Y chromosome is a small submetacentric (Hsu and Benirschke, 1976; Wurster and Benirschke, 1968; Wurster-Hill, 1973).

**CONSERVATION STATUS.** The skin of jaguarundis is considered to have no commercial value, so animals are not hunted for skins (Broad, 1987). Annual average trade of live jaguarundis reported to CITES between 1976 and 1990 was 1.5 animals (Nowell and Jackson, 1996).

*Herpailurus yagouaroundi* is classified globally in category 5c and regionally in category 5 (the lowest conservation priority) by the Species Survival Commission/Cat Specialist Group of IUCN. The species is not listed by IUCN (Nowell and Jackson, 1996). The subspecies occurring in North and Central America are in Appen-

dix I of CITES (Thornback and Jenkins, 1982). *H. yagouaroundi* also was classified as vulnerable (IUCN/SSC/CBSC, 1994; Oliveira, 1994). In captivity, jaguarundis were found in 46 zoos in Brazil and in zoos participating in ISIS in 1992. However, only six zoos successfully bred this cat, showing that captive breeding is still poor. The 83.1% population growth between 1989 and 1992 is considered mainly a result of an increase in the number of wild-born animals in captivity (Oliveira, 1994, 1995). The Global Captive Action Plan for Felids listed the east-Mexican jaguarundi (*H. y. cacomitli*) sixth and the overall species tenth (and last) in order of priority for captive propagation of Neotropical felids (Wildt et al., 1992). However, the species also has been ranked seventh (Oliveira, 1994, 1995).

**REMARKS.** There is much controversy on the validity of Geoffroy (1803) as a publication because it does not meet the requirements of the International Code of Zoological Nomenclature (Wilson and Reeder, 1993). Thus, some authors have used *H. yagouaroundi* (Lacépède, 1809). The different color phases originally were described as two different species, *H. yagouaroundi* (dark phase) and *H. eyra* (reddish phase). Based on albumin immunological distance, jaguarundis are placed in the *Panthera* lineage, which radiated 4–6 × 10<sup>6</sup> years ago. However, its relationship within this group is unclear (Collier and O'Brien, 1985).

Jaguarundis have at least 41 different common names throughout their range. In northern Brazil, the three different color phases are known by three different names (Oliveira, 1994). The name *Herpailurus* derives from the Latin "herpa" meaning strange (or unknown), and the Greek "ilurus" meaning cat. The specific name *yagouaroundi*, is derived from the Guarani word ("yaguarundi") used to call this cat (Azara, 1802). The word "yagua" (or "jagua, yaguara, jaguara") refers to all meat-eating animals, and the termination "rundi" is probably derived from the word "irundi," which means number four or, alternatively, it may be derived from "hung'i," which means brownish or tawny (Carvalho, 1979; Tibiriça, 1989). Therefore, "yaguarundi" would mean the fourth cat (which is a way that has been used by the Guarani to describe other similar species) or the brownish cat.

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