## **Ecology Animal Reading**

## **Pyrenean Ibex**

#### **Behavior and physical characteristics**

The Pyrenean ibex had short hair which varied according to seasons. During the summer, its hair was short, and in winter, the hair grew longer and thicker. The hair on the ibex's neck remained long through all seasons. Male and female ibex could be distinguished due to color, fur, and horn differences. The male was a faded grayish brown during the summer, and they were decorated with black in several places on the body such as the mane, forelegs, and forehead. In the winter, the ibex was less colorful. The male transformed from a greyish brown to a dull grey and where the spots were once black, it became dull and faded. The female ibex, though, could be mistaken for a deer since its coat was brown throughout the summer. Unlike the male ibex, a female lacked black coloring. Young ibex were colored like the female for the first year of life.

The male had large, thick horns, curving outwards and backwards, then outwards and downwards, then inwards and upwards. The surface of the horn was ridged, and the ridges developing progressively with age. The ridges were said to each represent a year, so the total would correspond to the ibex's age. The female had short, cylindrical horns. Ibex fed on vegetation such as grasses and herbs.

Pyrenean ibex migrated according to seasons. In spring, the ibex would migrate to more elevated parts of mountains where females and males would mate. In spring, females would normally separate from the males, so they could give birth in more isolated areas. Kids were typically born during May, usually singularly. During the winter, the ibex would migrate to valleys that are not covered in snow. These valleys allowed them to eat regardless of the change in season.

#### Habitat

The species was often seen in parts of France, Portugal, Spain, and Andorra, but not as much in northern areas of the Iberian Peninsula. In areas like Andorra and France in the mainland, the Pyrenean ibex became extinct first in the northern tip of the Iberian Peninsula. The Pyrenean ibex was estimated to have a peak population of 50,000 individuals with more than 50 other subgroups that ranged from the Sierra Nevadas to Sierra Morena and Muela de Cortes. Many of these subgroups lived in mountainous terrain extending into Spain and Portugal. The last remaining Pyrenean ibex were seen in areas of the Middle and Eastern Pyrenees, below 1,200 m altitude. However, in areas of southern France and surrounding areas, ibex were found from 350– 925 m to 1,190–2,240 m.

The Pyrenean ibex was quite abundant until the 14th century and numbers did not dwindle in the region until the mid-19th century. Pyrenean ibex tended to live in rocky habitats with cliffs and trees interspersed with scrub or pine trees. However, small patches of rocks in farmland or various areas along the Iberian coast also formed suitable habitat. The ibex was able to thrive well in its environment as long as the appropriate habitat was available, and was able to disperse rapidly and colonize quickly. Pyrenean ibex formed a useful resource for humans, which may have been a cause of their eventual extinction. Researchers say that the eventual downfall of the Pyrenean ibex may have been caused by continuous hunting and even perhaps that the animal could not compete with the other livestock in the area. However, definite reasons for the extinction of this animal are still unknown. The subspecies once ranged across the Pyrenees in France and Spain and the surrounding area, including the Basque Country, Navarre, north Argaon, and north Catalonia. A few hundred years ago, they were numerous, but by 1900, their numbers had fallen to fewer than 100. From 1910 onwards, their numbers never rose above 40, and the subspecies was found only in a small part of Ordesa National Park, in Huesca.

# CUBAN IVORY BILLED WOODPECKER

#### Habitat

As with *C. principalis*, the Cuban ivory-bill was thought to inhabit oldgrowth forests with a plentiful supply of dead or dying trees; these were a source of the cerambycid and other beetle larvae that formed the bulk of its diet. Most of Cuba's lowland deciduous forests had been cleared by the early twentieth century, and the species became restricted to the montane pine forests in the north-east of the island. Its original range was given as through the Organ Mountains, in the lowland forests of the Ensenada de Cochinos and along the Hanabana River.

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#### Behavior

There are relatively few accounts of the bird's behavior in the wild. The ornithologist John V. Dennis located a few birds in 1948 and noted some of their feeding and other habits, commenting that "they spent so much time [preening and scratching] that I considered it unusual". He observed that they were not especially shy or elusive once they had become used to his presence, eventually "seeming positively lethargic", although a male bird intervened quickly to drive a sparrow-hawk away from the nesting site.

The breeding season of *C. p. bairdii* occurred from March–June. It has been surmised that the woodpecker's foraging specialization may have led to its forming small groups, much like *Campephilus imperialis* which was occasionally reported in groups of eight or more individuals; this behavior would enable the birds to best exploit a patchily-occurring food source.

## <u>Tasmanian Tiger</u>

## Ecology and behavior

One of only two known photos of a thylacine with a distended pouch, bearing young

Little is known about the behavior or habitat of the thylacine. A few observations were made of the animal in captivity, but only limited, anecdotal evidence exists of the animal's behavior in the wild. Most observations were made during the day whereas the thylacine was naturally nocturnal. Those observations, made in the twentieth century, may have been atypical as they were of a species already under the stresses that would soon lead to its extinction. Some behavioral characteristics have been extrapolated from the behavior of its close relative, the Tasmanian devil.

The thylacine probably preferred the dry eucalyptus forests, wetlands, and grasslands in continental Austrialia. Indigenous Australian rock paintings indicate that the thylacine lived throughout mainland Australia and New Guinea. Proof of the animal's existence in mainland Australia came from a desiccated carcass that was discovered in a cave in the Nullarbor Plain in Western Australia in 1990; carbon dating revealed it to be around 3,300 years old. In Tasmania, it preferred the woodlands of the midlands and coastal heath, which eventually became the primary focus of British settlers seeking grazing land for their livestock. The striped pattern may have provided camouflage in woodland conditions, but it may have also served for identification purposes. The animal had a typical home range of between 40 and 80 km<sup>2</sup> (15 and 31 sq. mi). It appears to have kept to its home range without being territorial; groups too large to be a family unit were sometimes observed together.

The thylacine was a nocturnal and crepuscular hunter, spending the daylight hours in small caves or hollow tree trunks in a nest of twigs, bark or fern fronds. It tended to retreat to the hills and forest for shelter during the day and hunted in the open heath at night. Early observers noted that the animal was typically shy and secretive, with awareness of the presence of humans and generally avoiding contact, though it occasionally showed inquisitive traits. At the time, much stigma existed in regard to its "fierce" nature; this is likely to be due to its perceived threat to agriculture.

There is evidence for at least some year-round breeding (cull records show joeys discovered in the pouch at all times of the year), although the peak breeding season was in winter and spring.<sup>[25]</sup> They would produce up to four cubs per litter (typically two or three), carrying the young in a pouch for up to three months and protecting them until they were at least half adult size. Early pouch young were hairless and blind, but they had their eyes open and were fully furred by the time they left the pouch. After leaving the pouch, and until they were developed enough to assist, the juveniles would remain in the lair while their mother hunted. Thylacines only once bred successfully in captivity, in Melbourne Zoon in 1899. Their life expectancy in the wild is estimated to have been 5 to 7 years, although captive specimens survived up to 9 years.

#### Diet

Although there are methods that can be used to identify the diet and feeding behavior of thylacine, findings and theories on this subject remain hotly debated. A study published in 2011 yields some insight: "Dental and biogeochemical evidence suggests that T. cynocephalus was a hypercarnivore restricted to eating vertebrate flesh". The thylacine was exclusively carnivorous. Its stomach was muscular, and could distend to allow the animal to eat large amounts of food at one time,

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probably an adaptation to compensate for long periods when hunting was unsuccessful and food scarce. Analysis of the skeletal frame and observations of it in captivity suggest that it preferred to single out a target animal and pursue that animal until it was exhausted. Some studies conclude that the animal may have hunted in small family groups, with the main group herding prey in the general direction of an individual waiting in ambush. Trappers reported it as an ambush predator.

Little is known of the thylacines diet and feeding behavior. Prey is believed to have included kangaroos, wallabies and wombats, birds and small animals such as potoroos and possums. One prey animal may have been the once common Tasmanian emu. The emu was a large, flightless bird which shared the habitat of the thylacine and was hunted to extinction around 1850, possibly coinciding with the decline in thylacine numbers. Both dingoes and foxes have been noted to hunt the emu on the mainland. European settlers believed the thylacine to prev upon farmers' sheep and poultry. Throughout the 20th century, the thylacine was often characterized as primarily a blood drinker; according to Robert Paddle, the story's popularity seems to have originated from a single second-hand account heard by Geoffrey Smith (1881–1916 in a shepherd's hut. In captivity, thylacines were fed a wide variety of foods, including dead rabbits and wallabies as well as beef, mutton, horse, and occasionally poultry. Tasmania's leading naturalist Michael Sharland published an article in 1957 stating that a captive thylacine refused to eat dead wallaby flesh or to kill and eat a live wallaby offered to it, but "ultimately it was persuaded to eat by having the smell of blood from a freshly killed wallaby put before its nose."