Wild Fur Identification

an identification aid for *Lynx* species fur

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WILD FUR ID

Wild Fur Identifica-

-an identification and classification aid for *Lynx* species fur pelts.

Purpose: There are four species of *Lynx* including the Bobcat* (*Lynx rufus*), Canada Lynx* (*Lynx canadensis*), Eurasian Lynx* (*Lynx lynx*), and the Iberian Lynx* (*Lynx pardinus*). *L. rufus* are found in North America ranging from central Mexico to southern Canada. Currently, *L. rufus* are found in all of the contiguous United States except Delaware. Recent estimates suggest that there are at least 1.4 to 2.6 million *L. rufus* in the United States. The IUCN currently list *L. rufus* in the category 'Least Concern', the same status as coyotes and whitetail deer. Currently, 39 states permit some sort of limited take of *L. rufus,* and this species is utilized in international wild fur markets.

This reference is intended to aid in distinguishing *Lynx rufus* pelts from the other three *Lynx* species. This manual was developed by Cornell University, Ithaca, New York, USA.

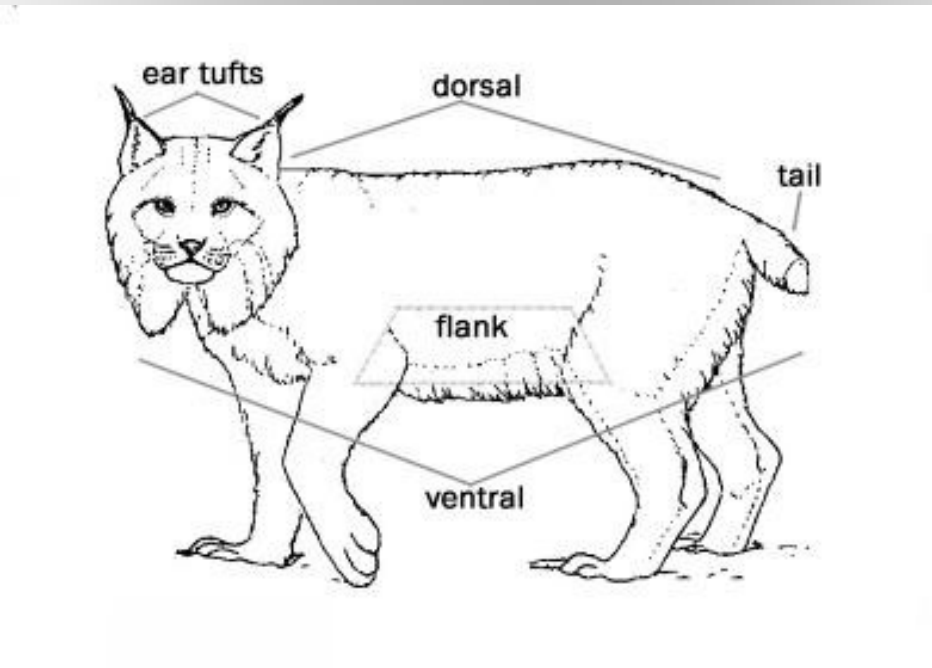
* there are numerous common and local names for each species

*updated March 4, 2010

Lynx species

There are four species of *Lynx* including the Bobcat* (*Lynx rufus*), Canada Lynx* (*Lynx canadensis*), Eurasian Lynx* (*Lynx lynx*), and the Iberian Lynx* (*Lynx pardinus*). These species represent the genus *Lynx*. While related, each is a unique species with unique characteristics that define the species.

There are several characteristics that are useful to distinguish *L. rufus* from the other *Lynx* species including coloration of the dorsal and ventral sides, flank, and tail. In addition, the relative size and length of the legs, feet, and ear tufts are also useful characteristics. Please refer to the image below for descriptions of these terms.



The following pages have detailed descriptions and comparisons of the different *Lynx* species.

* there are numerous common and local names for each species

Lynx species

Lynx rufus

The smallest of the *Lynx* species, *L. rufus* is found from southern Canada (approximately 50th parallel) to Central Mexico (approximately 18th parallel) (Young 1958). The mean total length of *L. rufus* is 869 mm for males and 786 mm for females. The mean tail length is 148 mm for males and 137 mm for females (McCord and Cardoza 1982). Mean body mass of *L. rufus* is 9.6 kg for males and 6.8 kg for females (Lariviere and Walton 1987).

All four species can have fur tufts on the face and ears and thus, this characteristic is not a reliable means of identification. Conversely, the feet of *L. rufus* are smaller, relative to overall body size, than the other *Lynx* species.

The fur of *L. rufus* is dense, short, and generally a yellow, reddish, or tawny color with black spots and black-tipped guard hairs. The ventral portion of the abdomen is white with black spots, and the forelegs have black spots or horizontal bars (please note that the other *Lynx* species, notably *L. pardinus,* occasionally have spotting in this area). All lynx species have some black on the tip of the tail, ***L. rufus* is the only species in which the black is limited to the dorsal surface of the tip of the tail. The tail coloration is a definitive characteristic of *L. rufus*.**

Due to the large geographic range of *L. rufus*, there can be some variation in pelage coloration and marking. The traits listed on the following pages can aid in distinguishing *L. rufus* from the other *Lynx* species.

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Lynx rufus

Due to the large geographic range of *L. rufus*, there can be some variation in pelage coloration and marking. The following traits will aid in distinguishing *L. rufus* from the other *Lynx* species.

The *L. rufus* on the left is a reddish to tawny color while the *L. canadensis* (right) is a gray-silver color. Both species have a black tip to the tail on the dorsal side, but on the *L. rufus* the underside of the tail is white.

Lynx species

Lynx rufus

The white underside of the tail is clearly visible in *L. rufus* (left). Conversely, the black tip of the tail is clearly visible on the underside of this *L. lynx* (right).

The ventral side of the tip of the tail is always white in *L. rufus* (left). Conversely, the black tip of the tail is clearly visible on the underside of this *L. pardinus* (right) and the other two *Lynx* species.

Lynx species

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Lynx rufus

The ear tufts of *L. rufus* (left) are much shorter than those in the other *Lynx* species (*L. canadensis* on right).

The dorsal side of *L. rufus* (left) is generally dominated by reddish-brown or tawny colors. Conversely, the dorsal portion of the *L. lynx* (right) and *L. canadensis* is generally dominated by a grayish-silver color.

Lynx species

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Lynx rufus

The *L. rufus* on the left is heavily spotted for the species. However, the spots are still less defined than those of *L. pardinus* (right).

The *L. rufus* (left) has clearer spots on the ventral side than *L.* canadensis (right) or *L. lynx*. Again, the coloration on the flanks on *L. rufus* is generally a reddish-brown or tawny color, while the *L. canadensis* is typically a grayish-silver.

Lynx species

Lynx canadensis

L. canadensis is found throughout most of Canada and the U.S. state of Alaska. This species is also found in northern reaches of the contiguous United States and high elevations in the Rocky Mountains. *L. canadensis* were once considered a subspecies of *Lynx lynx* but are now recognized as a unique species.

On average, *L. canadensis* is slightly larger than *L. rufus* with an approximate mean weight of 10 kg for males and 8.5 kg for females. The feet of *L. canadensis* are considerably larger than *L. rufus* relative to body size. Similarly, the legs are much longer, relative to body size, than those of *L. rufus*. The toes of *L. canadensis* are also joined by a web (Durrant 1952, Hall 1981).

The fur of *L. canadensis* is dense, long and yellowish-gray to grayish-brown and grayish-silver in color. Some *L. canadensis* have spots on the ventral side, though these are generally not well-defined. **Unlike *L. rufus*, the black tip completely encircles the tail of *L. canadensis***. In addition, a reliable genetic test exists to distinguish *L. rufus* from *L. canadensis* using only hair (Mills 2000).

The following pages contain photographs and comparative descriptions of *L. canadensis* pelts.

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Lynx canadensis

While the *L. rufus* on the left has some silver and gray coloration, it is dominated by a reddish to tawny color while the *L. canadensis* (right) is a gray-silver color. Both species have a black tip to the tail on the dorsal side, but on the *L. rufus* the underside of the tail is white. Notice the short tail in *L. canadensis*.

The white underside of the tail is clearly visible on *L. rufus (*left) while the black tip is visible on the *L. canadensis* (right). Also, notice the *L. canadensis* has less overall spotting, and these spots are not as well-defined.

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Lynx canadensis

The *L. rufus* (left) has a white ventral side of the tail tip. The *L. canadensis* (right) has a black ventral side of the tail tip.

The ear tufts of this *L. rufus* (left) from the western USA are much smaller than those of *L. canadensis* (right).

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Lynx canadensis

The dorsal side of the *L. rufus* on the left is dominated by red, brown, and tawny colors. Conversely, the dorsal side of the *L. canadensis* on the right is dominated by gray and silver colors.

The ventral side of the *L. rufus* on the left has clearer spots than the *L. Canadensis* (right). The white belly of this *L. rufus* contrast with the red and tawny colors of the flank. The spots on the *L. canadensis* are much less defined and the flanks are a gray to silver color.

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Lynx lynx

L. lynx is found in much of the boreal, taiga, and mountainous regions of Europe, central Asia, the Tibetan plateau, and Asia minor. *L. canadensis* and *L. pardinus* were once considered subspecies of *L. lynx* but are now recognized as a unique species.

L. lynx is the largest of the *Lynx* species and considerably larger than *L. rufus*. In Sweden, the mean weight for males was found to be 17.9 kg and 16.8 kg for females (Haglund 1966). In Russia, the mean weight for males was documented to be 19.6 kg for males and 17.3 kg for females (Heptner and Sludskii 1992). This is almost twice the size as *L. rufus*. The feet of *L. lynx* are considerably larger than *L. rufus* relative to body size. Similarly, the legs are much longer, relative to body size, than those of *L. rufus*. The toes of *L. lynx* are also joined by a web.

The fur of *L. lynx* is generally dense, long and silver-gray, yellowish gray to grayish brown in color. Spotting patterns in *L. lynx* vary from almost no spots or mottling to well defined spots. Spots are found on the ventral side of the abdomen and, on occasion, the forelegs. **Unlike *L. rufus*, the black tip completely encircles the tail of *L. lynx*.**

The following pages contain photographs and comparative descriptions of *L. lynx* pelts.

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Lynx lynx

The *L. rufus* on the left is a reddish to tawny color while the *L. lynx* of Russian origin (right) has more gray and silver colors. Both species have a black tip to the tail on the dorsal side, but on the *L. canadensis* the underside of the tail is white. The *L. lynx* specimen is approximately 30% larger than the *L. rufus*.

The *L. lynx* on the right is of Russian origin and has an exceptional pale ventral side. However, there is very little red or tawny coloration like *L. rufus* (left) and more silver and gray, especially around the throat, chin, and flanks. The black ventral side of the tail tip of *L. lynx* (right) is clearly different from the white ventral side of the tail tip on *L. rufus* (left).

Lynx species

Lynx lynx

L. rufus (left) is the only *Lynx* with a white ventral side to the tip of the tail. The *L. lynx* on the right has black that encircles the entire tip.

Notice the red and tawny color of the dorsal fur of the *L. rufus* (left) compared to the silver-gray dominated color of the *L. lynx*. (right).

Lynx species

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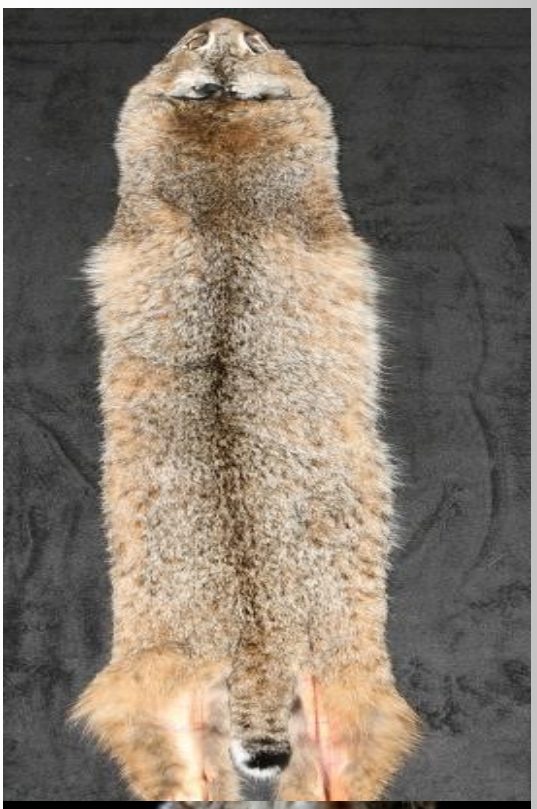
Lynx lynx



The *L. lynx* on the right is of Chinese origin and was collected during the summer. The black-tipped tail, long legs, and lack of significant spotting all help distinguish this specimen from the *L. rufus* on the left. Some *L. lynx* may lack the dominant silver-grayish dorsal coloration, but the other characteristics (eg tail coloration, less defined spotting on *L. lynx,* large legs and feet of *L. lynx*) can provide additional evidence to distinguish these specimens from *L. rufus*.

The *L. lynx* on the right is of Chinese origin and, while it has some red coloration on the dorsal side, the ventral spots are much less defined than those of the *L. rufus* on left.

Lynx species

Lynx pardinus

L. pardinus is found only in Spain and possibly Portugal. This critically endangered species is found only in a few isolated locations in these nations. *L. pardinus* was considered a subspecies of *L. lynx* but is now recognized as a unique species.

L. pardinus is considerably smaller than *L. lynx*. The mean weight of males is 12.8 kg and 9.3 kg for females (Beltran and Belibes 1993). Like *L. lynx* and *L. canadensis*, this species has large, broad feet. Similarly, the legs are much longer, relative to body size, than those of *L. rufus*.

The fur of *L. pardinus* is yellowish-red or tawny. This species is heavily spotted and can have spots on both the ventral and dorsal sides. A decrease in pelage variation has been observed with the decline of this species (Beltran and Delibres 1993) . The texture and density is described as "relatively sparse, coarse, and short" (Sunquist and Sunquist 2002). **Unlike *L. rufus*, the black tip completely encircles the tail of *L. pardinus*.**

The following pages contain photographs and comparative descriptions of *L. pardinus* pelts.

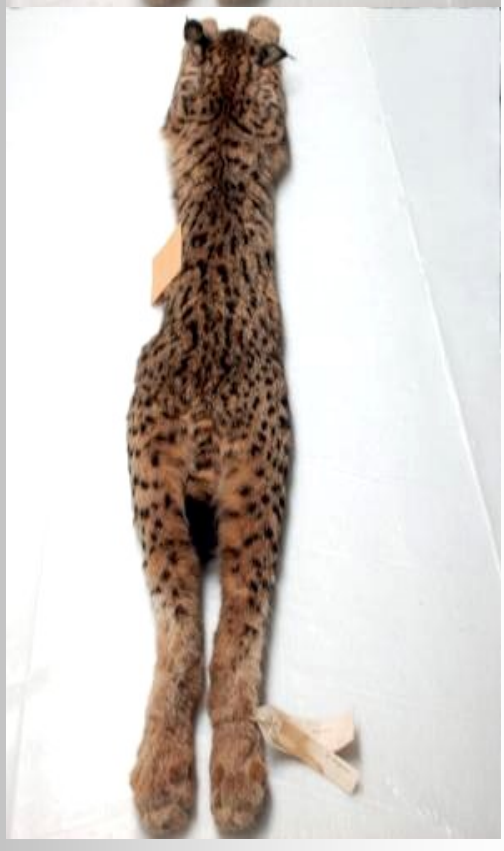
Lynx species

Lynx pardinus

The

L. pardinus on the right is heavily spotted with spots on the flanks and dorsal side. The fur is short, sparse, and coarse. The *L. rufus* (left) has dense fur and fewer spots. The feet and legs of *L. pardinus* are also large relative to the body size. Both species have black on the dorsal tip of the tail, but only *L.rufus* has a white underside to the tip of the tail.

Even this heavily spotted *L. rufus* (left) from the southern USA has less overall spots and less defined spots than the *L. pardinus* (right).



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Lynx pardinus

The black tip on the ventral side of the *L. pardinus* tail is clearly visible (right). Conversely, the white ventral tip of the tail is clearly visible on the *L. rufus*. *L. rufus* is the only *Lynx* species with a white ventral tip of the tail. Notice large feet on the *L. pardinus* and the heavy spotting.

The black tip on the ventral side of the *L. pardinus* tail is clearly visible (right).
L. rufus (left) is the only *Lynx* species that has a white ventral side to the tip of the tail.

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Lynx pardinus

The ear tufts on the *L. rufus* (left) are much smaller than those on *L. pardinus* (right).

Some variation in pelage patterns can occur in all Lynx species. The two *Lynx pardinus* on the right demonstrate some of this variation. Observe that these specimens can be easily distinguished from the heavily spotted *L. rufus* on the left based on the tail coloration. ***L. rufus* is the <u>only species</u> in which the black is limited to the dorsal surface of the tip of the tail.**

-images of live animals provided by Instituto de Ecología, Universidad Nacional Autónoma de México.

Lynx species

Lynx pardinus

The *L. rufus* on the left is a heavily spotted specimen from the western USA. The spots on *L. pardinus* (right) extend from the belly, over the flanks, and onto the dorsal side. The spots on *L. rufus* are found primarily on the ventral portion and extend to the legs. Spots on the *L. rufus* can be found on the flanks and dorsal side (see above), however these spots generally lose definition and clarity in these areas. The spots on the flanks and dorsal portion of the *L. pardinus* are typically well defined.

Identification of Pelts

Raw pelts, those that have not been tanned, are marketed as whole pelts. A whole pelt possesses the head and face, flanks, belly, back, partial legs, and the tail. Many pelts prepared for the fur market do not have the feet or the majority of the front legs intact. Pelts missing both the head and tail would be extremely rare. However, should this occur, there are characteristics of the fur that can be used to distinguish *L. rufus* from other *Lynx* species.

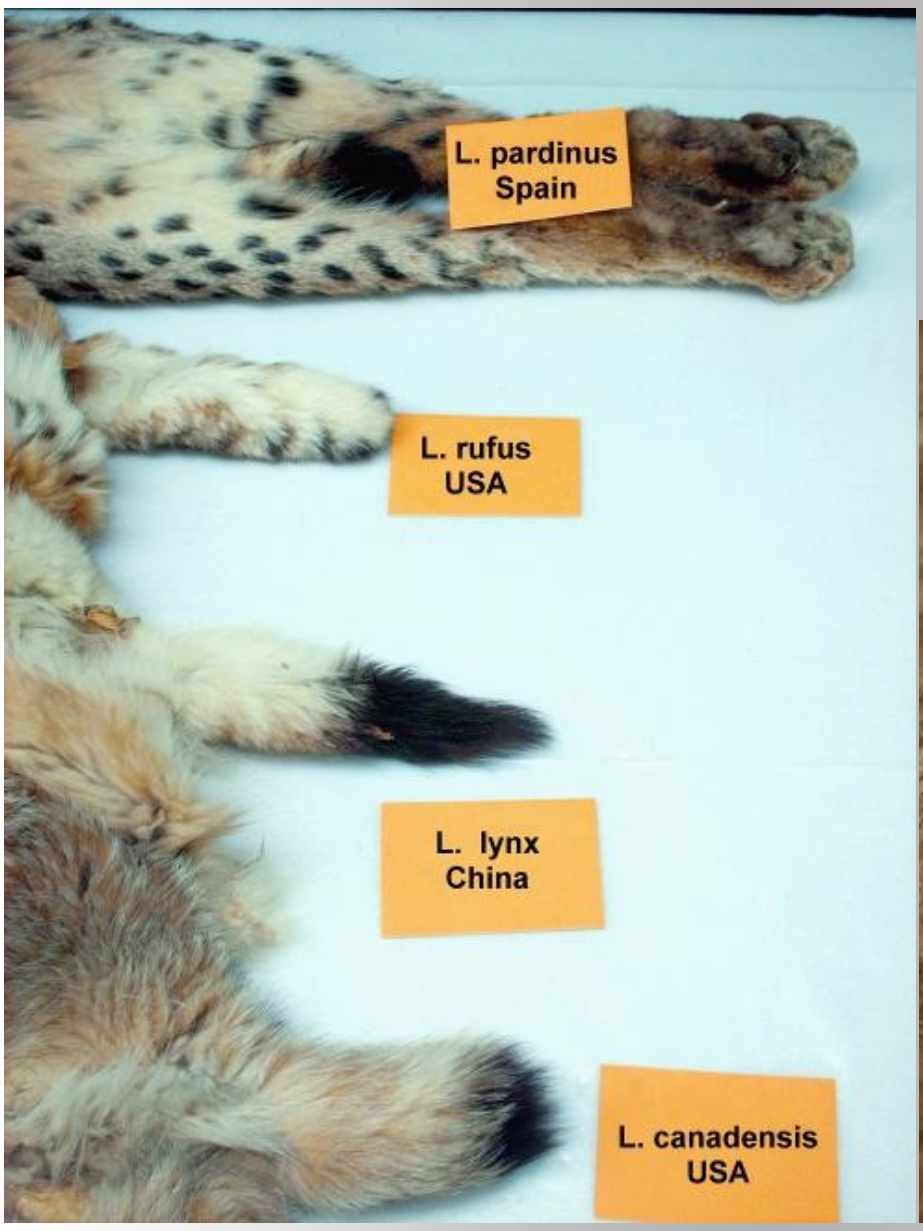
Please familiarize yourself with the *Lynx* species by first reading the species descriptions provided. For each species, there is a comparison of characteristics with the *L. rufus*.

L. rufus can be easily distinguished from the other *Lynx* species using pelt and fur characteristics. These characteristics are described in the following pages.

Identification of Pelts

1) Tail coloration

All lynx species have some black on the tip of the tail, ***L. rufus*** **is the only species in which the black is limited to the dorsal surface of the tip of the tail.**



The ventral side of the tip of the tail is black for all *Lynx* except *L. rufus.*

Identification of Pelts

2) Ear tufts

While all *Lynx* species have ear tufts, *L. rufus* has the shortest ear tufts of the *Lynx* species.

The ear tufts of this heavily furred *L. rufus* (left) from the western USA are much smaller than those of *L. canadensis* (right).

The ear tufts of the *L. rufus* on the left are considerably smaller than those of *L. pardinus* (right).

Identification of Pelts

3) Pelt color and texture

L. rufus (left) generally have a reddish, yellow, or tawny coloration on the dorsal side. *L. canadensis* (right) are dominated by silver and gray colors. *L. rufus* has shorter legs, smaller feet, and smaller ear tufts than the other *Lynx* species. *L. rufus* typically has more spotting than *L. canadensis* or *L. lynx*.

Even an unusually heavily spotted *L. rufus* (left) has less spots, and less distinct spots, than the typical *L. pardinus* (right).

Identification of Pelts

3) Pelt color and texture - continued

The dorsal side of the *L. rufus* (left) is generally dominated by red, brown, and tawny colors. Conversely, the dorsal side of the *L. canadensis* (right) is dominated by gray and silver colors.

The ventral side of the *L. rufus* (left) has clearer spots than the *L. canadensis* (right) or *L. lynx*. The white belly of *L. rufus* contrast with the red and tawny colors of the flank. The spots on the *L. canadensis* are much less defined and the flanks are a gray to silver color.

Identification of Pelts

3) Pelt color and texture - continued

A heavily spotted *L. rufus* (left*)* still has less defined spots than the *L. pardinus* on the right. While a *L. rufus* can have spots on the flanks and dorsal side, those spots generally lose definition and clarity relative to the belly spots. The spots on the flanks and dorsal side of the *L. pardinus* are clear and well-defined.

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