

## THE ISATIS, or ARCTIC DOG\*.

IF a number of resemblances, joined to a perfect conformity of internal parts, were sufficient to constitute unity of species, the wolf, the fox, and the dog, would form but one; for the resemblances are more numerous than the differences, and the similarity of the internal parts is complete. These three animals, how-

\* Arctic dog with a sharp nose; short rounded ears, almost hid in the fur; long and soft hair, somewhat woolly; short legs; toes covered on all parts, like that of a hare, with fur; tail shorter than that of the common fox, and more bushy. This animal is of a bluish gray, or ash-colour, and sometimes white. The young of the gray are black before they come to maturity. The hair is much longer in winter than summer, as is usual with animals of cold climates; *Pennant's Synops. of Quad.* p. 155.

*Isatis*, the name given by Gmelin to this animal; it is called *Pisak* in the Russian language; *Voyage de Gmelin*, tom. ii. p. 215.

*Vulpes alba*; *Vulpes craccigera*; *Aldrov. de Quad. Digit.* p. 221.

*Canis hieme alba*, afflate ex cinereo caeruleus; *Briffon. Quad.* p. 174.

Fox; *Marten's Spizberg.* p. 100. *Egede Greenl.* p. 62. *Crass. Græcol.* vol. i. p. 72.

Ashen-coloured fox; *Schæffer, Lapland.* p. 135.

*Canis lagopus*, cauda recta, apice concolore; *Linn. Syst. Nat.* p. 59.

Fial racka; *Fass. Suec.* No. 8.

Babus; *Kalm*, p. 216.

Isatis; *Nov. Gen. Petrop.* tom. v. p. 358.

ever, not only constitute three distinct species, but are so distant from each other, as to admit intermediate species. The jackal is an intermediate species between the dog and wolf; and the isatis is placed between the fox and dog. The isatis has hitherto been regarded as a variety of the fox. But the description given of it by Gmelin demonstrates it to be a different species.

The isatis is common in all the northern regions bordering on the frozen sea, and is never found on this side of the 60th degree of latitude. In the figure of the body, and the length of the tail, he is perfectly similar to the fox; but his head has a greater resemblance to that of the dog. His hair is softer than that of the common fox, and his fur is sometimes white, and sometimes of a bluish ash-colour. The head is short in proportion to the body; it is broad near the neck, and is terminated by a sharp muzzle. The ears are almost round. He has five toes and five claws on the fore-feet, and only four on those behind. The penis of the male is scarcely so thick as a goose quill. The testicles are as large as almonds, and are so concealed with the hair, that it is difficult to perceive them. The hair over the whole body is about two inches long, smooth, bushy, and soft as wool. The nostrils and under lip are naked, and the skin of these parts is black.

In both male and female, the stomach, viscera, intestines, and spermatie vessels, are similar to those of the dog: There is even a bone in the penis of the male, and the whole skeleton resembles that of a fox.

The voice of the isatis partakes of the barking of a dog and the yelping of a fox. The merchants who deal in furs distinguish two kinds of isatis, the one white, and the other of a bluish ash-colour. The latter are most esteemed, and their price advances in proportion to their blueness or brownness. This difference of colour is not sufficient to constitute a difference of species; for M. Gmelin was assured by the most experienced hunters, that, in the same litter, some of the young are white, and others ash-coloured.

The isatis is an animal peculiar to the northern regions. He prefers the coasts of the frozen sea, and the banks of the rivers which fall into it. He loves open countries, and never frequents the woods. He is found in the coldest and most naked mountains of Norway, Lapland, Siberia, and Iceland\*. These animals copulate in the month of March; and, their organs of generation being formed like those of the dog, they cannot separate for some time. Their rut-

\* It is probably by falling on boards of ice that the foxes have found their way into Iceland, where they are very numerous. Some of them are black; but they are commonly gray or blue in summer, and white in winter; in which last season their fur is best; *Anderson's Nat. Hist. of Iceland*, tom. i. p. 56.

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ting season lasts fifteen days, or three weeks, during which they are always in the open air; and afterwards they retire to their holes, which are narrow, very deep, and have several entries. They keep their holes clean, and make beds of moss in them. The time of gestation, like that of the bitch, is about nine weeks. The females bring forth about the end of June or beginning of May, and generally produce six, seven, or eight at a litter\*. Those which are to be white, are yellowish at birth, and those which are to be of a bluish ash-colour, are blackish, and their hair is then very short. The mother suckles and attends them in the hole during five or six weeks; after which, she makes them go out, and brings them victuals. In the month of September, their hair is more than half an inch long. At this period, those which are to be white, are almost entirely so, except a brown band along the back, and another across the shoulders. It is then that the isatis is called the *criss-fox*†. But this brown cross disappears before winter, when they are entirely white, and their hair more than two inches in length. About the month of May, the hair begins to fall

\* M. Gmelin says, from the testimony of hunters, that these animals sometimes produce twenty or twenty-five at one litter. But this fact is extremely suspicious.

† From this circumstance, it is probable that the *vulpes crassicauda* of Gmelin, *Icon. Zool.* p. 190. and of Rzaczinski, *Hist. Nat. Pol.* p. 231. is the same animal with the isatis.

off, and the moulting is finished in July: Hence the fur is good in winter only.

The isatis lives upon rats, hares, and birds; and, in seizing them, he uses as much address as the fox. He swims across lakes in quest of the nests of ducks and of geese, and eats the eggs and the young. In these cold and desert regions, he has no enemy but the glutton, who lies in ambush for him.

As the wolf, the fox, the glutton, and the other animals which inhabit the northern regions of Europe and Asia, have passed from the one continent to the other, and are found in America, the isatis ought likewise to be found there; and I presume, that the silver-gray fox of North America, of which Catesby\* has given a figure, is the isatis, and not a simple variety of the fox.

### S U P P L E M E N T.

IN a letter from London, dated the 19th day of February 1768, Mr. Colinson communicates the following notice:

' My friend M. Paul Demidoff, a Russian, who  
' is an admirer of your works, sends you a draw-  
' ing of an undescribed animal, called *Coffar*. It

\* Nat. Hist. of Carolina, tom. ii. fig. p. 78.

\* was

Plate CXXII.



*A. B. Schenk.*

ISATIS.

‘ was brought from the vast deserts of Tartary,  
 ‘ situated between the rivers Jaick, Emba, and  
 ‘ the sources of the Irtysh. These collars are so  
 ‘ numerous in that part of the country, that the  
 ‘ Tartars transport annually 50,000 of their  
 ‘ skins to Oremburgh, from whence they are  
 ‘ carried to Siberia and Turkey. From the point  
 ‘ of the muzzle to the origin of the tail, this  
 ‘ animal is about one foot and eight inches in  
 ‘ length; and his tail is ten inches long.

‘ The shape of the head, the mild aspect, and  
 ‘ the barking of this animal, seem to bring him  
 ‘ near to the dog. His tail, however, and his  
 ‘ fine soft fur, make him approach the fox. His  
 ‘ blood is ardent, and his breath has a disagree-  
 ‘ able odour, like that of the jackal and wolf.’

From the drawing, and still more from the short  
 descriptions of M. Demidoff and M. Gmelin, this  
 animal appears to be the *isatis*; and, for that  
 reason, I have caused it to be engraven.