

BOGDIVERSITY THURSDAY



—*from Head Naturalist Clinton*

Red Fox

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March is a season for big changes and movements from a lot of different species. Mammals, at least in the case of carnivores in our area, begin moving around seeking out mates or den sites. Recently, one species has become very visible on the landscape if you have been keeping a close eye on roadside tracks! Our featured species today is Red Fox!

There are four species of canine in the Sax-Zim Bog: Gray Fox, Red Fox, Coyote, and Gray Wolf. Of these canines, Red Foxes are probably seen most frequently by visitors. A cosmopolitan species, Red Foxes are found across North America, Europe, Asia, and are also native to north Africa. They are found in, but not native to, Australia where they are a huge threat to the biodiversity of the country. Across their range, Red Foxes are well adapted to a wide range of conditions from cold, subarctic conditions to hot, arid deserts. This has led to no fewer than 46 (!) subspecies. Red Foxes found in North America compromise a number of subspecies which have been isolated from Eurasian subspecies for around 400,000 years and are likely distinct

enough from Eurasian subspecies to warrant species status. There are lots of fascinating wrinkles to the biogeography of the subspecies of Red Fox and I would encourage folks to read further about their distribution.

Presently, Red Foxes are getting toward the end of their breeding season, which means females are seeking out dens to give birth. Opportunities abound for denning sites abound in the Sax-Zim Bog: abandoned homesteads, toppled tree root structures, or old dens of larger mammals work great for a den site. However, industrious foxes will dig their own den sites. Female foxes will give birth to 4-7 kits, which will stay with their mother until the late fall. Red Foxes are primarily solitary, outside of the breeding season. One of the coolest things about Red Foxes are the wide range of names for males and females. Female foxes are called vixens; young foxes are called kits or pups; while male foxes might be called dog foxes, reynards, or tods! There are also distinct names for odd color forms, like Cross Fox or Silver Fox.

Many wild canines are omnivores for parts of the season, but shift depending on what food is available. For example, Red Foxes during the winter eat almost exclusively mammals or birds if they can catch them. But during the summer months, they might expand their diet to include fruits and insects. One of their most exciting foraging behaviors can be seen primarily during the winter, especially in periods of deep snow. Plunge hunting is one of the most interesting foraging behaviors seen by foxes and coyotes. This hunting method consists of two parts: find prey and then extracting prey! Foxes have great hearing and when actively

hunting they can often be seen staring at the ground and moving slowly. Once a fox detects the rustlings of a vole under the snow, they need to get them out. To do this, they leap into the air and dive head first to break through snow crusts and capture their prey!

If you are hoping to see a Red Fox in the Sax-Zim Bog, keep your eyes peeled along the edges of wetlands, forests, or through the large areas of alder swamp. A nocturnally active species, Red Foxes are sometimes active into the late afternoon, but spend most of their day sleeping.

More information included in the photos below!

(Photos of foxes by Sparky Stensaas; Photos of tracks below by Head Naturalist Clinton)



When plunge hunting, Red Foxes leap quite high into the air to impact the snow with enough force to not only break through the snow crust, but to dive deep into the snow to capture their mammalian prey.



Red Fox kits don't stray too far from their den sites when they are young, but that doesn't stop them from practicing the skills needed to be an effective predator. This kit is practicing the pouncing skills it will need to plunge hunt!



This dark canine is a Red Fox in one of its many coat variations. This particular variation, with a mix of black, orange, and white tones is referred to as a Cross Fox.



This lovely Red Fox has begun to transition to its fall/winter coat. Their coats are the most dense and fluffy for only the fall and winter season.



Though this fox looks a little worse for wear, it is perfectly fine. The summer coats of most canines are quite thin and the energy demands of feeding lots of kits keep foxes quite thin. Which is normal and nothing to draw much concern.



Red Foxes have really furry feet during the winter, meaning their tracks don't often offer lots of obvious features! One of the most distinct features of their tracks is the bar on the back side of the paw pad of the front feet (as seen in the left most track above).