

FOX SQUIRRELS: A POTENTIALLY NOVEL PREY ITEM FOR SNOWY OWLS IN SASKATCHEWAN

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There have been considerable studies published about the prey items consumed by Snowy Owls (*Bubo scandiacus*) especially during the time of the year when they over-winter on the Great Plains of North America.¹ The take home message of the summary study by Detienne et al. (2008) is that this owl appears to be highly flexible and will eat most anything that it can catch, although mammalian prey do seem to be preferred.

On 30 December 2022, we found a heavily barred individual Snowy Owl on the ground in a stubble field, which we identified as a female. The bird was approximately 10 km south of Regina and approximately 3 km east of Highway #6, about 400 m south of the grid road we were driving along. The individual was clearly eating something (Figures 1-4). We observed it for about 15 minutes. Within 100 m of the owl was a human dwelling surrounded by an extensive shelterbelt consisting of both deciduous and coniferous trees. The extent of the treed vegetation is likely important given that based on observation through binoculars and photographs (all by ACB), we identified the prey item as a Fox Squirrel (*Sciurus niger*). While very versatile in their habitat choices, Fox Squirrels are most often found in forest patches of 40 ha or less with an open understory, or in urban neighborhoods with trees.² We acknowledge that our identification of the squirrel has to be qualified based on the distance we were from the bird and the fact that some of it had been eaten. However, based on the size of the prey, colour (there was both light and reddish coloured fur), the large length



FIGURES 1-4: Photographs of Snowy owl eating. Note the length of the intestine in Figure 3. Photos taken by Anne Brigham.

of intestine indicating the prey species was a herbivore (Figure 3), and the fact that Fox Squirrels are strictly diurnal² and do not hibernate³ makes us reasonably confident of our identification. To the best of our knowledge, this species has not been previously recorded as a prey item for Snowy Owls in an extensive study in nearby Montana.¹ Fox Squirrels have naturally invaded the Regina area only in the past several decades.⁴

We cannot be completely confident that the prey was not an American Red Squirrel (*Tamiasciurus hudsonicus*) although the local distribution of this species does not include our observation point. Red Squirrels typically prefer more heavily wooded areas although Taylor documented an instance in Manitoba

where wintering red squirrels could have been exposed to Snowy Owl predation.⁵

We thank Peter Taylor for his thoughtful comments on an earlier draft of the manuscript.

1. Detienne JC, Holt D, Seidensticker MT and Pitz T (2008) Diet of Snowy Owls Wintering in West-Central Montana with Comparisons to Other North American Studies. *Journal of Raptor Research* 42:172-179.

2. Koprowski JL (1979) *Sciurus niger*. *Mammalian Species* (479):1-9. doi:10.2307/3504263

3. Brigham RM and Geiser F (2012) Do red squirrels (*Tamiasciurus hudsonicus*) use daily torpor during winter? *Ecoscience* 19:127-132.

4. Adam CIG (1984) The Fox Squirrel in Saskatchewan. *Blue Jay* 42:241-246.

5. Taylor P (2012) Squirrel house on the prairie. *Blue Jay* 70:259-260. 🐿