

Successful Diurnal Foraging by a Barred Owl in Open Field Habitat in Winter

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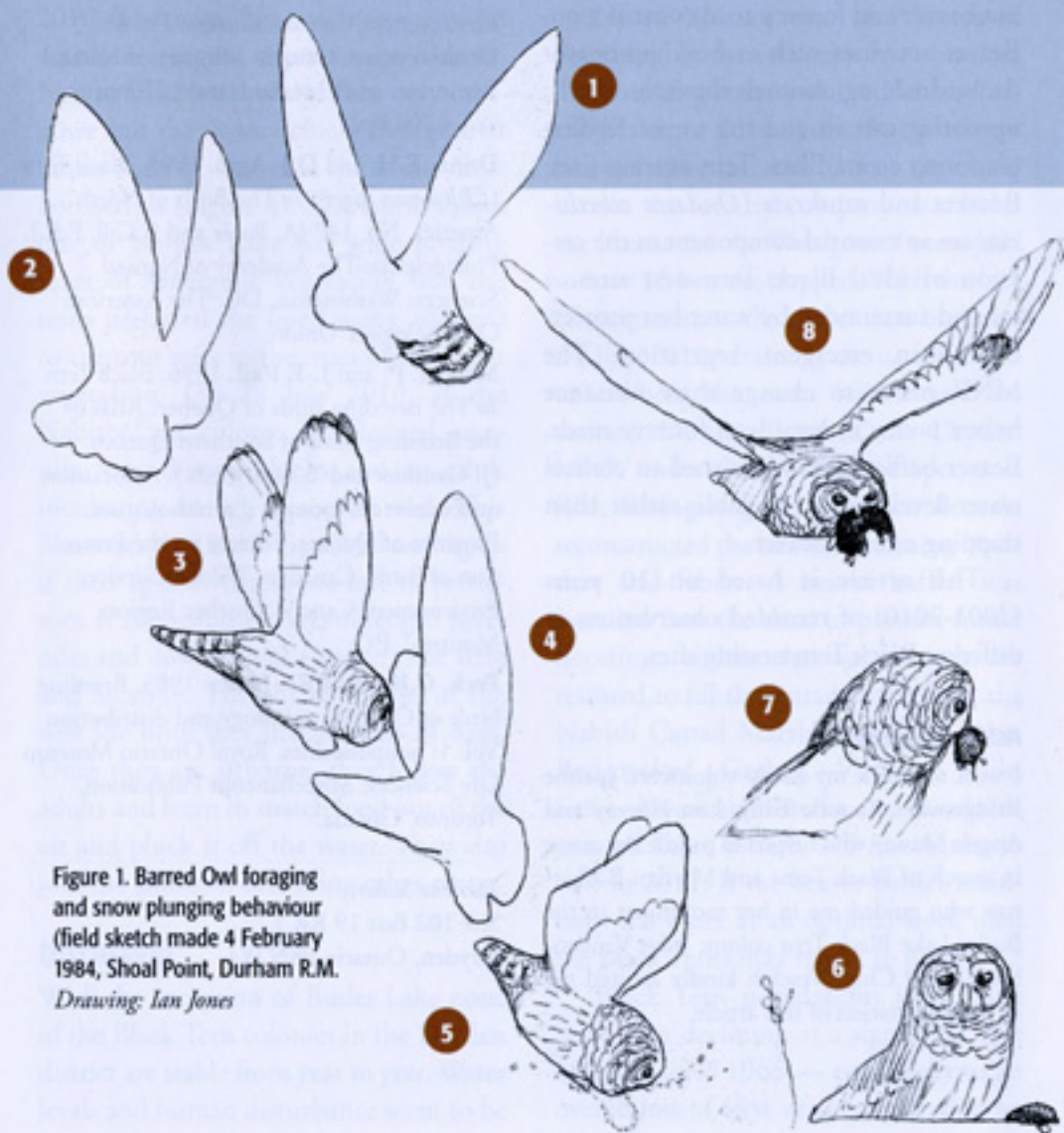


Figure 1. Barred Owl foraging and snow plunging behaviour (field sketch made 4 February 1984, Shoal Point, Durham R.M. Drawing: Ian Jones)

The Barred Owl (*Strix varia*) is considered a semi-nocturnal to nocturnal hunter with hunting activity highest immediately following sunset (Elderkin 1987, Mazur and James 2000). Despite the earlier assertion by Bent (1938) that there is plenty of evidence that this species does much of its foraging in daylight, there evidently have been few published accounts documenting such behaviour. Reports suggesting diurnal foraging have come largely from pellet analysis. Several authors (Errington 1932, Errington and MacDonald 1937) have reported the remains of such primarily diurnal bird species as Blue Jay (*Cyanocitta cristata*) and Dark-eyed Junco (*Junco hyemalis*) in the pellets of the Barred Owl. While suggestive of diurnal foraging, such reports are not entirely conclusive. Caldwell (1972) reported an observation of a Barred Owl foraging at midday along the grassy roadside verge through a forested area of central Michigan. Nero (1993) related several instances of apparent diurnal snow-plunging by Barred Owls, but reported that such behaviour was apparently rare. Jackson and White (1995) documented several instances of daytime foraging by Barred Owls in Louisiana. Most recently, James (2007) reported an observation of diurnal foraging and snow-plunging in open field habitat in Durham Regional Municipality, Ontario. The observation reported herein documents an instance of successful foraging by a Barred Owl in open field habitat at midday in winter.

Observation

At 1107h on 4 February 1984 the authors encountered a Barred Owl sitting 4-5 m in an isolated, 15 m ash (*Fraxinus* sp.) in the middle of a wet shrub meadow/fallow field approximately 30 m east of Shoal Point Road, Town of Ajax, Durham Regional Municipality (43° 50' 29" N, 78° 59' 42" W), Ontario. The day was overcast, calm and 3°C and the landscape was generally snow-covered. While under observation, the bird was alert, swiveling its head constantly in response to the observers' squeaking and 'pishing', alternating between watching the observers and 'scanning' its surroundings. After a minute or two, it suddenly averted its attention from the observers, fixing its gaze instead on a point out in the field.

Leaving its perch, it flew approximately 30 m out over the field before abruptly turning mid-flight, hovering briefly, and then plunging head first into the snow,

thrusting its talons forward at the point of impact (Figure 1). It then became very alert, sitting upright, again swiveling its head and watching. Mantling slightly, it raised the prey in one talon, picking at it with its bill. From its relatively large size, dark coloration, distinctive feet and long, pinkish thickened tail, and pink-tentacled snout the prey was very obviously a Star-nosed Mole (*Condylura cristata*). After a short period of observation, the owl then picked up the mole in its bill and took flight, flying a metre or two above the ground, west across the road and a further 20 m to a perch approximately 5 m in an aspen (*Populus* sp.) at the edge of a white cedar (*Thuja occidentalis*)-aspen-ash swamp (Figures 2a, b). The observers then walked into the field to examine the point of capture. The general area of capture was covered by a 10-15 cm layer of very wet to saturated snow underlain by meltwater. Numerous subnivean small



Figure 2a. Barred Owl in flight carrying Star-nosed Mole in its bill, 4 February 1984, Shoal Point, Durham R.M. Photo: Ian Jones

Figure 2b. Enlarged detail showing prey: note dark pelage, pink feet and long, naked tail, thickened in the middle Photo: Ian Jones



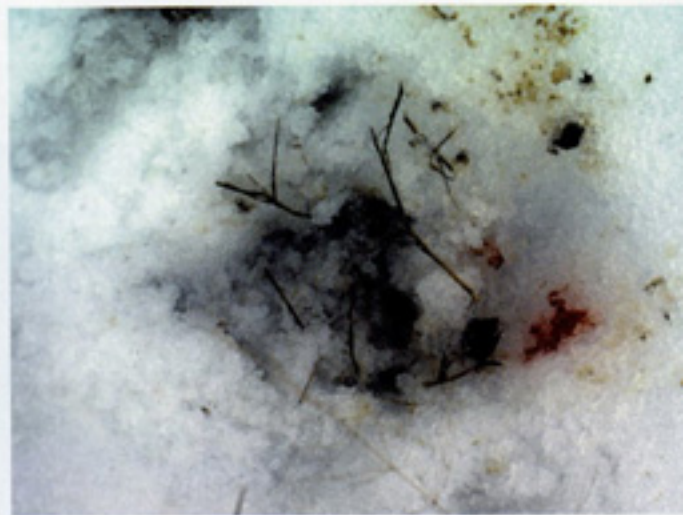
mammal tunnels were evident, one of which terminated at the entrance to a subterranean mole-tunnel around which the snow was stained red with blood (Figure 3).

Discussion

Normally sedentary, the Barred Owl periodically vacates northern portions of its range in winter coincident with reduced prey abundance (Mazur and James 2000). The winter of 1983-84 was marked by a major incursion of Barred Owl in southern Ontario; 61 individuals were reported in areas generally south of the species' breeding range (Weir 1984). Barred Owls typically avoid open areas.

In a study of habitat use by the Barred Owl throughout the year in central Minnesota, Nicholls and Warner (1972) demonstrated that irrespective of time of year, open habitats were utilized least by individuals and habitats such as alder thicket swamp, marsh and old field were avoided. Hunting in the open in daylight may be induced by hunger (Nero 1993; James 2007). Nero (1993) reported that in Manitoba during the winter of 1986-87 one individual captured for banding was noticeably thin. Young birds without a breeding territory are far more likely to feed in daylight hours, especially during post-fledging dispersal in late summer through fall, and individuals in poor

Figure 3: Plunge hole, showing mole tunnel entrance and blood-stained snow, 4 February 1984, Shoal Point, Durham, R.M. Photo: Ian Jones.



condition that have survived the winter are also more likely to feed in the open during daylight hours (M.F. Elderkin, pers. comm.). Barred Owls may be induced to forage in open areas during daylight hours, particularly in winter, when open habitats may harbour higher prey densities. Daylight foraging by Barred Owls in open habitats may be a more common or even expectable, particularly during periodic winter incursions in southern Ontario.

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