Birds Component

Introduction

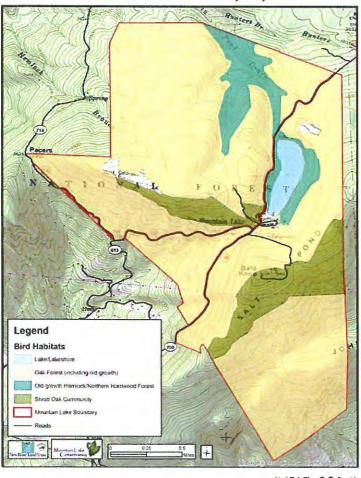
Please note that this section and the Birds Appendix, excluding the habitat map, are copyright protected (Copyright © Ryan Mays, 2013. All rights reserved). Ryan Mays was very generous with his time and expertise in drofting material for the purposes of this conservation plan in the fall of 2013. This section lists priority bird species documented on the property. The Birds Appendix describes all bird species known by the author to have been recorded at Mountain Lake and the immediate vicinity. The Appendix also includes a References section for all citations found in this section and in the Birds Appendix.

The Mountain Lake Conservancy and Lodge property (the property) is characterized by high-elevation forests that support diverse biotic communities similar to those in Canada and the northern United States. Bird populations on Salt Pond Mountain are closely associated with topographical and altitudinal variation and have been studied there and in other parts of the Mountain Lake region for over a century by many observers (e.g. Kessler and Larner 1984; Johnston 2000). Although much of the region was logged starting around the turn of the nineteenth century, small tracts of the original forest escaped destruction and have remained relatively undisturbed into modern times. The range in elevation af approximately 600m between the summit and base of Salt Pond Mountain allows for much diversity in both floral and faunal communities including the birds described in this plan.

Ryan Mays identifies four general types of bird habitat on the property. These are displayed in the map adjoining this text. The highest priority birds found in each habitat type are detailed below and for all documented birds in the Birds Appendix.

The old-growth hemlock-northern hardwood forest around Mountain Lake and along Pond Drain Creek is perhaps the most unique habitat in the Mountain Lake area. Many of the bird species which depend on this habitat for breeding are high-elevation species including the Northern Saw-whet Owl, Yellow-bellied Sapsucker, Blue-headed Vireo, Black-capped Chickadee, Brown Creeper, Golden-crowned Kinglet, Winter Wren, Blackburnian Warbler, Black-throated Green Warbler, Blackthroated Blue Warbler, Canada Warbler, Rose-breasted Grosbeak, and Dark-eyed Junco. The rare Northern Goshawk may also nest in this community.

Bird Habits on the Property

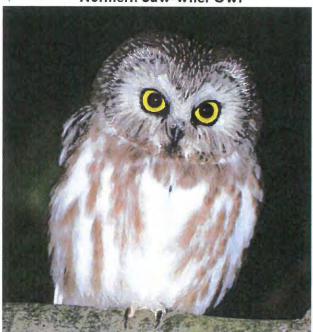


Highest Priority Species

There are several bird species that occur or formerly occurred at Mountain Lake which are currently ranked as rare or threatened in Virginia by the Yirginia Department of Conservation and Recreation's Division of Natural Heritage (DCR-DNH). The following confirmed breeding bird species are ranked as extremely rare breeders (S1B) or very rare breeders (S2B) in the 2013 Virginia Rare Animal List prepared by the DCR-DNH (Roble, 2013):

- Spotted Sandpiper (S2B);
- Northern Saw-whet Owl (S1B);
- Yellow-bellied Sapsucker (\$1B);
- Winter Wren (\$2B); and
- Blackburnian Warbler (S2B).





Blackburnian Warbler



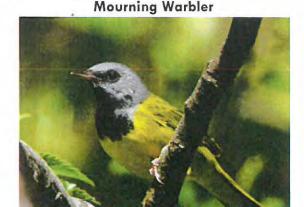
(Ogburn, 2013)

(Weidensaul, 2008)

Outside of the breeding season however, the Spotted Sandpiper is a common transient throughout Virginia (Rottenborn and Brinkley, 2007). The Northern Saw-whet Owl is considered a rare to uncommon transient and winter resident, and the Yellow-bellied Sapsucker and Winter Wren are uncommon to common transients and winter residents in the state (Rottenborn and Brinkley, 2007; Roble, 2013). The Blackburnian Warbler is an uncommon to fairly rare transient (Rottenborn and Brinkley, 2007).

Bird species that are potential breeders at Mountain Lake which are also ranked by the DCR-DNH as very rare breeders in Virginia include the following:

- Red-breasted Nuthatch (S2B);
- Hermit Thrush (S1B);
- Mourning Warbler (S1B);
- and Red Crossbill (S1B).



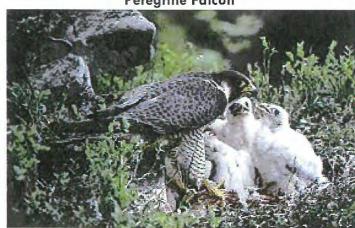
(Lepkowki Date Unknown)

Species that formerly occurred during the breeding season and may have nested or that occurred and were confirmed nesting (SHB) around Mountain Lake include:

- Peregrine Falcon (S1B);
- Golden Eagle (SHB);
- Olive-sided Flycatcher (SHB);
- and Bewick's Wren (SHB).

Of these, the Peregrine Falcon is also listed as threatened (LT) in Virginia (Roble, 2013).

Peregrine Falcon



(www.telegraph.co.uk, Date Unknown)

Second Priority Species

Other bird species which the author considers to have a status of special concern at Mountain Lake include the following:

- 1. Sharp-shinned Hawk;
- 2. Cooper's Hawk;
- 3. Northern Goshawk;
- 4. Red-shouldered Hawk;
- 5. Barred Owl:
- 6. Acadian Flycatcher;
- 7. Least Flycatcher;
- 8. Great Crested Flycatcher;
- 9. Blue-headed Vireo:
- 10. Red-eyed Vireo;
- 11. Common Raven;
- 12. Black-capped Chickadee;

- 13. Brown Creeper;
- 14. Veery;
- 15. Wood Thrush;
- 16. Ovenbird:
- 17. Louisiana Waterthrush;
- 18. Black-and-White Warbler;
- 19. Common Yellowthroat;
- 20. Hooded Warbler:
- 21. American Redstart:
- 22. Cerulean Warbler;
- 23. Northern Parula;
- 24. Magnolia Warbler;

25. Chestnut-sided Warbler;

26. Black-throated Blue Warbler;

27. Black-throated Green Warbler;

28. Canada Warbler;

29. Yellow-breasted Chat;

30. Scarlet Tanager;

31. Fox Sparrow;

32. Rose-breasted Grosbeak;

33. and Pine Siskin.

These species are either permanent residents at Mountain Lake or occur as breeding residents or transients. Additional information about all the bird species can be found in the Birds Appendix.

Management Recommendations

The following conclusions can be made based on the Virginia Rare Species List and the ornithological observations accumulated at Mountain Lake through the years:

- Naturally occurring meadow and strand habitats around Mountain Lake itself (i.e. during dry
 years with low lake-level) should be left undisturbed to protect breeding Spotted Sandpipers.
 Other species also benefit from this habitat including less rare breeding birds in Virginia such as
 Killdeers, American Woodcocks, and Song Sparrows.
- The very rare Northern Saw-whet Owl clearly requires the unique old-growth hemlocknorthern hardwood forest that occurs around Mountain Lake and along Pond Drain Creek.
 Monitoring for this species in future years would be helpful to determine its population status.
- The Yellow-bellied Sapsucker appears to require mostly hardwood forest for breeding at
 Mountain Lake. The area around Mountain Lake Lodge seems to be preferred for nesting, but
 breeding pairs feed and collect food for their young in the old-growth hemlock-northern
 hardwood forest, the oak forest, as well as the natural and unnatural clearings at this locale.
- Both the Winter Wren and Blackburnian Warbler require the old-growth hemlock-northern hardwood forest for breeding. These species, like the Northern Saw-whet Owl, are sensitive even to small-scale unnatural forest disturbances.
- Shrub and meadow habitats are important for many species at Mountain Lake, as the annotated list of species in the Birds Appendix demonstrates.

The old-growth hemlock-northern hardwood forest is the habitat of most especial concern at Mountain Lake for all other breeding, potential breeding, transient, and permanent resident species that depend on it. Some species may disappear from this habitat even before they are documented as breeding if the habitat is not preserved. For example, the Northern Goshawk was found nesting in the vicinity of the property in 2012. This hawk has not yet been added to the Virginia Rare Animal List, but it may soon be listed as an extremely rare, endangered breeding species (\$1B; LE) in Virginia. Contiguous forest tracts (including old-growth hemlocknorthern hardwoods) are most certainly a requirement of the Northern Goshawk during the breeding season. Protecting such habitats simultaneously benefits many other species including the Neotropical migrants (i.e. flycatchers, vireos, thrushes, warblers), many of which are already severely declining due to forest fragmentation and destruction in Central and South America.

The forests of the Mountain Lake area, especially those immediately surrounding the Lake and along Pond Drain Creek (the old-growth hemlock-northern hardwood forest community), should be left undisturbed to sustain bird populations breeding and/or overwintering there with the exception of certain measures taken to save old trees or prevent the spread of exotic invasive plant species. Moreover, if bird populations and the habitats upon which they depend are preserved, bird watching at Mountain Lake can continue to provide enjoyment and education for hotel guests and other visitors as well as researchers for many years to come. The birds of Mountain Lake are among the most obvious indicators of ecosystem health and the effects of human intrusions on Salt Pond Mountain.