Peer and Partner Comments Received for SGCN: Mammals Compiled October 2014

MDIFW's responses (in blue) to peer and partner comments were provided by Wally Jakubas, Research and Assessment Section, and were reviewed by the respective species specialists and section supervisor.

For comments related to the general process for designating species of greatest conservation need, please see the presentations 'SGCN Process' from the July 8, 2014 meeting and 'Revised SGCN Process' from the September 30, 2014 meeting on Maine's Wildlife Action Plan revision website (http://www.maine.gov/ifw/wildlife/reports/MWAP2015.html).

Please direct any questions to mainewildlifeactionplan@gmail.com.

1. Email from Mac Hunter (7/7/14)

I might have listed some other bats based on Criterion 6 --like the three long distant migrants--given the dearth of information.

See response to Comment 2 below.

2. Comments from July 8, 2014 break-out group

 Tree bats are conspicuously absent from the list. There are concerns over the impacts of wind power on these species. All of Maine's tree bats have been labelled Special Concern (traditionally implying potential ET candidate species) since 1994.

MDIFW agrees that all bat species should receive greater attention than they have in the past. Currently, MDIFW is planning to participate in the North American Bat Monitoring program, whose goal is to monitor bat population trends at local, state, regional, and continental levels. This program includes the monitoring of tree bats. The need for monitoring alone does not drive the SGCN ranking process. Given that monitoring will occur for our cave bats, which are proposed for SGCN ranking, we feel that concerns over the population trends of tree bats (i.e., hoary bat [Lasiurus cinereus], silver-haired bat [Lasionycteris noctivagans], and eastern red bat [Lasiurus borealis]), will be met by our overall bat monitoring efforts.

It was concluded at subsequent SGCN stakeholder's meetings that Species of Special Concern would also qualify for SGCN status. Therefore, the tree bat species named above will now be included as SGCN species.

Other potentially missing species – Rock Vole. Had been listed as Special
Concern during the period 1996 – 2008. Some additional finds from ecoregional
surveys by MDIFW. Distribution very similar to long-tailed shrew (high regional
responsibility in Northeast) but not quite the same level of regional endemism.
Uncertain about climate change vulnerability.

The yellow-nosed vole or rock vole (Microtus chrotorrhinus) was taken off Maine's Species of Special Concern list, because it was believed to be more widely distributed in Maine than once thought. Previously, M. chrotorrhinus was thought to mainly occur in high elevation spruce/fir forests. However, other research indicates that this species occurs in spruce/fir forests with favorable microhabitat characteristics (e.g., moss layer, sparse tree overstory). This habitat type does not appear to be rare in Maine. As of 2010, there were 19 known sites where rock voles had been found in Maine. While this species remains understudied and population trends are unknown, there do not appear to be any immediate threats to the habitat used by rock voles, and the IUCN lists M. chrotorrhinus as a species of least concern.

- For many small mammal species, there is inadequate information to determine whether they should be SGCN. Should 'data deficient' be a reason for inclusion?
- Harvest data exist for many mammal species, which could be used as an
 additional criterion for potential SGCN reviews / listing. For example, muskrats
 appear to be declining across the east, but Maine doesn't collect harvest data for
 this species, so we don't know if there's a problem here.

MDIFW acknowledges that muskrat populations have declined throughout most of the eastern half of the U.S. Furbearer biologists in the northeast have been examining causes of this decline for eight years. MDIFW has been collecting sex and age information from muskrat pelts since 2009 at the Maine Trappers Association Central Maine Chapter Fur Auction to identify patterns and causes of muskrat population trends. From these data, harvest levels appear stable. At this time, muskrats continue to be very abundant, and there is no evidence to warrant listing this species as SGCN.

 May want to include species that are declining nationally, but appear to be doing well in Maine (e.g. moose). We should gather information to understand why this pattern is happening, as it will help inform the conservation of the species across their range. MDIFW is concerned about trends in moose populations; however, evidence does not suggest that moose are declining nationally. In our own region, moose populations are believed to have declined in New Hampshire but are stable or increasing in Quebec and appear to be stable in Maine. In 2013, we began a five-year moose survival study to identify the factors that are most likely limiting moose population growth in Maine. Given that moose are currently abundant and stable in Maine, and that they have their own funding mechanism in a state-dedicated moose research account, listing this species as SGCN is not warranted at this time.

- Changing habitats pose a threat to many mammal species (examples = spruce budworm outbreaks & beech bark disease), although the impacts may not be apparent yet. Should this be a reason for inclusion?
- What about Marine Mammals? Are there any seal species that should be included? Some "accidental" species (like harp seals) generally not thought of as SGCNs analogous to stray migratory birds. Also, relatively new arrivals (like gray seals) may be somewhat rare but they are undergoing a general range expansion = also not a typical SGCN concern. Overall: need input from Maine DMR on marine mammals as there are some concerns for Harbor Porpoise in the northwest Atlantic.

Maine DMR will provide a response to this comment.

3. Comments from fish peer review break-out July 8, 2014

- Need to review marine species:
 - ESA listed species off list since already funded federally/internationally (e.g., whales) and not actively managed by the state?

Maine DMR will provide a response to this comment.

4. Comments from Jym St. Pierre (9/29/14)

Canada lynx (*Lynx Canadensis*). Our organization has been an active advocate of strong protection for Canada lynx and its habitat for two decades. In 2000, the Canada lynx was added to the national list as a threatened species. In 2005, the lynx was listed as a species of Special Concern in Maine's Comprehensive Wildlife Conservation Strategy. I note that the lynx is now proposed as a Priority 2 Species of Greatest Conservation Need in the new Wildlife Action Plan. However, since Maine's population of Canada lynx is of national significance and in the face of accelerating climate change

and shifting forest management practices, the lynx should be evaluated as a Priority 1 SGCN and should be added to the Maine Endangered Species list.

MDIFW recently reviewed that status of lynx in Maine, using standardized criteria for determining whether a species warrants listing under Maine's Endangered Species Act. It was determined that lynx do not warrant listing. Lynx were listed as threatened under the federal Endangered Species Act, in large part, because regulations on federal lands were inadequate to protect lynx. This situation does not exist in Maine because there is little federal land in Maine's lynx range. The lynx population in Maine likely reached an historic high since this species was listed as federally threatened in 2000. Because Maine's lynx population is of national significance we have given it a priority 2 SGCN rating.

While climate change may pose a threat to many wildlife species, the nature and severity of the threat is uncertain. For example, we now know that ocean warming in the western Pacific can affect polar air flow patterns over North America. Recently, we have seen how shifts in these air flow patterns can create record cold winters with considerable snow fall on the east coast. However, MDIFW believes there is no consistent evidence at this point to definitively conclude that lynx range will be reduced in Maine because of climate change. If in the immediate future, or 10-year course of this plan, climate change results in greater amounts of snow in winter in northeastern U.S., this could benefit lynx in Maine. We are not prepared to make immediate predictions regarding the effects of climate change on lynx in Maine.

Gray wolf (*Canis lupus*). Our organization has been a leading advocate of wolf recovery for more than 22 years. I do not see the wolf on any of the lists of Species of Greatest Conservation Need. The wolf was listed as a Priority 2 (High Priority) species in Maine's Comprehensive Wildlife Conservation Strategy in 2005. The species should again be listed in the new Wildlife Action Plan. Indeed, in light of the proposed delisting under the national Endangered Species Act, the wolf should be evaluated as a Priority 1 SGCN.

The gray wolf is believed to be extirpated in Maine. Although gray wolves were considered a Priority 2 SGCN species in 2005, we did not have the tools (e.g., genetic testing and use of carbon isotopes) that we have now to determine the origin of large canids found in the state. In 2005, we believed we had physical evidence that wolves were occasionally immigrating into Maine. Since that time, the presence of isotopes indicative of an animal feeding on corn-based foods were found in two wolves killed in Maine. We assumed that these animals likely had been feeding on a corn-based diet in captivity at one time. One animal's behavior around humans also was indicative of a captive-released animal. MDIFW continues to investigate potential wolf sightings but does not believe SGCN listing is warranted for species that are absent from Maine.

Eastern cougar (*Puma concolor cougar*). The eastern cougar was on the national endangered species list from 1973 to 2011. Although the cougar is now considered by some to have been extirpated in the U.S., the debate is not settled. To have any chance of recovery, the species should be evaluated as a Species of Greatest Conservation Need.

The eastern cougar is considered extirpated from Maine and the rest of the US. There is little biological evidence to suggest that it ever should have been considered a separate subspecies. While western cougars (Puma concolor) may be released in Maine or have the capability of dispersing to Maine, Maine does not have a known breeding pair of cougars living in the wild. As with the wolf, MDIFW does not feel that a species that does not occur in Maine warrants SGCN listing.