Review of Draft Species Assessment Report – Yellow-billed loon

March 2, 2014

Dear Timothy Jennings,

CC: Angela Matz

Below are some comments regarding the draft Species Assessment Report for yellow-billed loons. Overall, I found that the major conclusions are supported by the text and that the document represents a thorough review. Please feel free to contact me regarding any of my comments on the draft or otherwise.

Trevor B. Haynes

POINT 1

Schmidt et al. 2014 not in the literature cited.

POINT 2

If there is a desire to fill out the life history section, there are a couple points that can be included from papers that are in press:

With regards to nesting habitat, yellow-billed loons most frequently select nest sites that are sheltered from exposure to wind and waves, on islands or peninsulas, and have a high degree of visibility to detect approaching predators (Haynes et al. In Press - Waterbirds).

With regards to territoriality, there is evidence for strong interspecific competition between yellow-billed and Pacific loons, however; both species can co-occur when lakes are large or have convoluted shorelines, effectively creating visual and spatial separation between territories (Haynes et al. In Press- Journal of Avian Biology).

With regards to probability of yellow-billed loons being more likely to be present on lakes without Pacific loons, it is more likely the case that Pacific loons are avoiding lakes with yellow-billed loons (Haynes et al. In Press – Journal of Avian Biology).

Haynes T.B., J.A Schmutz, M.S. Lindberg, K.G. Wright, B.D. Uher-Koch, A.E. Rosenberger. In Press. Occupancy of yellow-billed and Pacific loons: evidence for interspecific competition and habitat mediated co-occurrence. Journal of Avian Biology.

Haynes T.B., J.A. Schmutz, M.S. Lindberg, A.E. Rosenberger. In Press. Risk of predation and weather events affect nest site selection by sympatric yellow-billed and Pacific loons in Arctic habitats. Waterbirds.

POINT 3

Page 9 – Diet

Slimy sculpin are a freshwater species with a range that overlaps with yellow-billed loons and could be considered a potential prey item due to their spatial concurrence. Other potential freshwater prey that have overlapping distributions with yellow-billed loons include rainbow smelt, arctic grayling, burbot and round whitefish. These species are more likely to be primary prey items than fourhorn sculpins which are generally restricted to marine or brackish waters.

POINT 4

Last paragraph on pg. 27, there is a repeated sentence that needs to be removed:

"Increased open water at the expense of ice cover could alter the Arctic food web, including affecting prey fish that are key needs for yellow-billed loons. For example, increased open water at the expense of ice cover could alter the Arctic food web, including affecting prey fish that are key needs for yellow-billed loons. For example, some research suggests changes in algae due to…"

POINT 5

Last sentence of paragraph 3 on pg. 59.

"Therefore, we again use the index population, which is currently stable or increasing, as a basis for our assertion that currently identified stressors for yellow-billed loons are not resulting in population-level effects."

The logic in this statement is not sound. Stressors for yellow-billed loons can have population level effects even if the population is stable or increasing. Stressors may decrease the intrinsic growth rate of the population even though that population may remain stable or continue to grow. A more accurate statement would be that currently identified stressors do not appear to be causing the index population growth to be less than one (i.e. a shrinking population).