

## 2014 Animals

### Conservation Status Rank Review and Changes

#### Freshwater Mussels:

**Winged Floater, *Anodonta nuttalliana*.** A slight change from S4 to S4? This is due to a re-assessment of the original information, using current ranking methodology. It is found in at least 24 waterbodies across southern BC and there are likely more locations in between. The potential introduction of zebra and quagga mussels is a significant threat, but it is unknown to what extent they will disperse if this occurs.

**Floater mussels *Anodonta kennerlyi* and *A. oregonensis*:** Status ranks cannot be assigned to *Anodonta kennerlyi* and *A. oregonensis* until the taxonomic uncertainty is sorted out. Until that happens, we have combined the two into the "*Anodonta kennerlyi/oregonensis* clade" based on Chong et al. 2008.

**Western Ridged Mussel, *Gonidea angulata*** changed from S1 to S2 and remains on the red list. This change does not reflect a change in trends; it is due to a re-assessment of the original information, using current ranking methodology.

***Lampsilis siliquoidea*, Fatmucket** is still not rankable because only empty shells have been found – and only on one occasion! Shells were in the Petitot River in north east B.C. Please let us know if you find them!

Photos here:

<http://linnet.geog.ubc.ca/efauna/Atlas/Atlas.aspx?sciname=Lampsilis%20siliquoidea>

#### Butterflies:

Two butterflies were added to the Provincial list.

**Edith's Copper, *Lycaena editha*** has been reported from only 3 locations in southeast B.C, within a range of approximately 250 to 5000 km<sup>2</sup>. It is ranked S1S2, which places it on the red list

**Northwest Ringlet, *Coenonympha tullia ampelos* (syn. *Coenonympha swadneri*).** This species was discovered near Yahk in 2006. Because we lack information needed to assess the status rank, it has been given a rank of SU (unknown).

#### Grasshoppers:

Fourteen grasshoppers had Conservation Status Ranks reviewed. In 2013 we received maps from a B.C. expert with compilations of data from museum specimens and his personal collecting data (Miskelly, unpublished data 2013). These made it possible to refine ranks further than previously able. We started with ones where it appeared that the new data may make the most difference to the rank. Nine resulted in a rank that denotes less at risk, one more at risk and for four species the data allowed an initial rank.

Four species were removed from the list and one added based on a newly published list of the Grasshoppers of B.C. (Miskelly 2013). This list can be found at: <http://journal.entsocbc.ca/index.php/journal/article/view/231>

We will continue to work through the rest of the species with this data in the coming year.

#### **Fish:**

The Ninespine Stickleback had rank of S1 based on a single occurrence. Review this year established that this species had "no evidence of a self-sustaining population" (McPhail 2007). It is now SU, or unknown.

#### **Birds:**

There were eight species of birds added as "accidentals". These are generally not important from a conservation or biological point of view but interesting to see if there are patterns, if some species start to show up more regularly and they are definitely of interest to those birders expanding their life or BC lists! The Red-flanked Bluetail attracted birders from all across North America as it was only the second occurrence of one on the continent.

Tundra Swan numbers have been increasing on the breeding grounds and in the numbers seen here in B.C. resulting in a small rank change of S3N to S3S4N.

Other birds that were assessed did not result in a change in status.

#### **Mammals:**

There were a couple of taxonomic updates this year.

A complete revision of American Martens (Dawson and Cook 2012) resulted in B.C. having two species of marten; Pacific (*Martes caurina*) and American (*M. americana*). The American Marten was reassessed with the new range shown below.



Mountain Beaver (*Aplodontia rufa*) was formerly split into two subspecies, experts have determined that they were not valid within their range in B.C. (Piaggio *et. al* 2013), and so is listed just at the species level.

Northern Elephant Seals have pupped on Race Rocks every year since 2009 and there have been breeding observed for a number of years prior to this. So far there have been only one breeding pair. This is the first year that they have been assessed as a breeder. The reports of non-breeders in BC waters have been increasing.

Steller's Sea Lion numbers have been increasing and there has been the re-establishment of a couple of formerly abandoned breeding colonies. There was a COSEWIC report written this past year that provided much of the recent data. The Conservation Status Rank has changed from S2S3B, S3N to S3B, S4N.

Dawson, N. G., and J. A. Cook. 2012. Behind the genes: diversification of North American martens (*Martes americana* and *M. caurina*). Pages 23-38 in K. B. Aubry, W. J. Zielinski, M. G. Raphael, and S. W. Buskirk, editors. Biology and conservation of martens, sables, and fishers: a new synthesis. Cornell University Press, Ithaca, New York.

Piaggio, A. J., B. Coghlan, A. Miscampbell, W. Arjo, D. Ransome and C. Ritland. 2013. Molecular phylogeny of an ancient rodent family (Aplodontiidae). Journal of Mammalogy. 94(3):529-543.