

## 2011 Zoology Rank Review and Changes

### Amphibians:

The amphibians were reviewed this year resulting in a rank change for three species.

Long-toed Salamander (*Ambystoma macrodactylum*) changed from S5 to S4S5, remaining on the yellow list. Due to a recent, comprehensive assessment for this species, it was determined that threats, including development, road building, logging, pollution and introduced species, are significant enough to change the S-rank of this wide-ranging salamander.

Wandering Salamander (*Aneides vagrans*) changed from S4 (yellow list) to S3S4 (blue list). Due to a recent, comprehensive assessment for this species, it was determined that threats, particularly logging and development, are significant enough to change the rank. There is some question as to the origins of the Wandering Salamander; however, to err on the side of caution, it has been assessed as a native species, until evidence proves otherwise.

Western Toad changed from S4 (yellow list) to S3S4 (blue list). Although it is widespread and abundant in the province, declines have been noted. In addition to threats that all amphibians face in B.C., *Batrachochytrium dendrobatidis* (an aquatic fungus that causes the disease chytridiomycosis in amphibians) has recently been confirmed in Western Toads and mortalities are currently being reported.

### Birds:

An exciting new addition is Parasitic Jaeger as a breeding bird in BC. Until 2010 it was only known as a non-breeder and was not assessed. Breeders were long suspected in BC near the border with Alaska along the Tatshenshini River. In the summer of 2010 this was confirmed. It is now S1B, S4M.

Bank Swallow, Sora, Savannah Sparrow, and Magnolia, McGillivray's and Mourning Warblers went from S5 to S4S5. Black-throated Gray Warbler was assessed and changed to a rank of S4 from S4S5. These changes were based on declining trends and threats.

A very small change was made to Peregrine Falcon, *anatum* ssp.. It is now S2? (was S2). The question mark reflects the uncertainty in the rank. There has been an increase, in number of eyries, but the stability of these or what the threats are remain in question.

Prairie Falcon is now S1S2, it was S2. There are a number of eyries that have not been occupied for a man years.

The rank for Baltimore Oriole was adjusted from S4S5 to S4?; this change came about both as a change in ranking methodology and the inability to determine if there has been any trend in population. There have been significant declines in Alberta and the rest of Canada, however the area that Baltimore Oriole occurs in BC is too small and remote to provide enough trend data to make this determination.

Yellow Rail was changed from S1 to S2. There has been an increase in the number of locations where Yellow Rails have been recorded over a wide range in the province. This may be due to an increased survey effort in addition to a range expansion. It is difficult to determine conclusively which is the driving factor (or a combination) because of the rails secretive habits.

Pileated Woodpecker, Lazuli Bunting and Dusky Flycatchers were also assessed as less imperilled; they are now S5, changed from S4S5.

There were a few changes to the designation of breeding, non breeding or year round resident that had been missed previously. These do not change the Conservation Status Rank.

### **Fish:**

There were no Conservation Status Rank changes this year. Work is ongoing in defining some population units of a number of species. These will be ranked in 2011.

### **Reptiles:**

The reptiles were not formally assessed this year; however, the non-native Snapping Turtle, *Chelydra serpentina*, has been added to the provincial list. They are reported from random locations on Vancouver Island and the lower mainland.

### **Molluscs:**

The molluscs did not go through a formal review this year; however, one native and three non-native species have been added to the provincial list.

Barren Juga (*Juga hemphilli*), a native, freshwater snail, was collected in 1883 from the headwaters of the Columbia River in the East Kootenay region of B.C. This is the only record in B.C. that we are aware of, thus it is ranked as SH (historical). Inventory is needed to determine if it is extant in the province.

The non-native freshwater snail, the New Zealand mudsnail (*Potamopyrgus antipodarum*), was recently (2008) detected in Port Alberni, Vancouver Island.

The Asiatic Clam (*Corbicula fluminaria*), is a non-native freshwater clam that can also inhabit brackish and estuarine waters. It is present on southern Vancouver Island and in the lower mainland.

The non-native terrestrial snail, Furrowed Helicellid (*Trochulus striolata*), was detected in 2007 from the Revelstoke area.

### **Mammals:**

A portion of the mammals were reviewed this year, including several ungulates, the majority of carnivore species, the killer whales, and lagomorphs (hares, rabbits, and pikas). There were few rank changes based on this review, most of which were due to new information and not due to genuine changes in status.

The ranks of all four distinct BC populations of killer whale were reviewed, largely using new information from a recent COSEWIC status report. The ranks of three of the four populations were revised to a higher risk category: the ranks for both the Offshore population and the Northern Resident population changed from S3 to S2 (and thus from the Blue list to the Red list), and the rank for the Southern Resident population changed from S2 to S1. All of these changes are due to newly available information on threats, population trends, and population size and do not reflect a major change in the true status of the populations.

The rank for Roosevelt Elk was revised from S3 to S3S4. Translocations of re-introduced animals in the Lower Mainland continue to be successful, and the Lower Mainland population is growing by an estimated 20% per year. The range rank of S3S4 reflects uncertainty in the status, as the lower mainland population is still small and has not been established for long; it remains to be seen how it will fare in the long run, though the current increase is promising.

The Long-Tailed Weasel, *altifrontalis* subspecies is a subspecies that has a geographic range that is restricted to the Lower Fraser Valley. The subspecies has not been reliably recorded since 1937 and there has been major habitat modification within its range. The rank was changed from SU (Status Unknown) to SH (Historical) to show that while there is a chance that the subspecies is extirpated from BC, there has been no concerted search effort and thus it cannot be known with certainty.

In addition to these rank reviews, there was some excitement in the world of British Columbia's bats this year. The Western Red Bat (*Lasiurus blossevillii*) has long been an enigma in the province, with its presence confirmed by only a single specimen from the Skagit Valley from 1907. In 2010 provincial bat experts were able to obtain a tissue sample from this specimen, and genetic analysis of the sample showed that it is actually an Eastern Red Bat (*L. borealis*), not a Western as had been assumed (visually discriminating between the two species is very difficult). So in one fell swoop we lost one species from the fauna of BC, but gained another. In addition to this re-identification, there were several specimens of Eastern Red Bat collected this year that were killed by wind turbines in the northeast part of the province. This part of the province is continuous with the species known range (the boreal forest), and the species has been detected more and more in northern Alberta over the last several years, so its appearance in BC was not unexpected. The Eastern Red Bat has been given a provisional rank of 'S1?' due to limited information, but a restricted range and apparent threats in the northeast from wind farms and also likely from oil and gas development.