The 2010 Norwegian Red List for Species

By J. A. Kålås, Å. Viken, S. Henriksen, and S. Skjelseth (editors). 2010. Norwegian Biodiversity Information Centre, Norway. 480 pages.

This publication of 26 chapters covering virtually all biodiversity species groups in Norway might be of general interest for the Canadian Naturalist. This latest 480 pages long 2010 Red List (updated from 2006) for Norway follows the IUCN standards. This publication comes as a hard copy or freely available online at http://www.artsdatabanken.no/Article.aspx?m=207&am id=8737. It comes with a 6 page glossary, 9 pages of literature citations and with a 23 page species index (in Latin and Norwegian); some photos, drawings and maps are provided also. An affiliated online database and more information on general species occurrence in Norway is found at www.artsdatabanken.no (but without good and obligatory metadata).

Red Lists such as this one are essentially biological dead-lists, because once a species is on it, it hardly comes back from it due to the ongoing and usually irreversible environmental degradation (unless political interference or bookkeeping methods are used to imply otherwise). The Red List text states that it tries to be a "...forecast of the risk that a species will die out in Norway". Norway pronounced boldly years ago that it aimed to stop all loss of biodiversity by 2010. But as obvious from this book, Norway failed in that delivery, and this book is a reference in time documenting how western society tries to deal with such things in times of a serious biodiversity crisis on a global scale.

I like this book, based on the fact that it provides the reader with much good and new information and documentation of the status quo. For instance, 2,300 vascular plants are reported for Norway; but only 46% of the plants are natural. Norway has the highest moss flora in Europe. Authors show that grassland fungi declined the last 50 years by 30–50%; and Bearded Lichens are shown to decline too. As found elsewhere in the world, old-growth forest is in short supply now. Forty Norwegian gastropod species are on the Red List also. One whale and one rodent are classified as recently extinct in Norway. For the first time, pseudo-scorpions and harvestman are now red listed too. The last 4 of the well-structured 26 chapters have most of the

hot discussed species in public though: fish, amphibians, birds and mammals (red listed are for instance Arctic fox, lynx, river otter, wolf, wolverine, Polar Bear, Brown Bear, Atlantic puffin and some bats).

Here are more details (taken from the numerous tables in the text): Finnmark and Troms reports the least amount of species on the Red List (350 and 411), Svalbard even only lists 71 species, but Oslo/Akershus shows already 1,462 species (the location where most Norwegians live). This confirms (a) that the Norwegian way of life resulted so far in many Red Listed species, and (b) that in times of climate change, probably too few Arctic species are already listed for meaningful assessments. Knowing the small mammal situation in Alaska and elsewhere, the Norwegian red listing for this species group, e.g., Svalbard and coastal islands and relevant meta populations, must already appear as widely underachieving (only Sorex isodon is listed for Svalbard). Auks like the Atlantic Puffin, Dovekie. Razorbill and Thick-billed Murre are in trouble now, one way or another.

The Norwegian freshwater management problems are exemplified by the 133 species of molluscs that are on the Red List. And despite claims of a sustainable fishery, 9% of Norwegian saltwater fish are already red listed. Oddly, however, salmon was not listed (but this species is locally extinct now in already over 50 rivers; and as the book states, a 20% population reduction occurred just within the last 10 years). Regarding some major fish species, the book reads: "Despite this serious decline in the stock, a directed and unlimited fishery is allowed for several months a year, thus worsening the situation". Any naturalist must wonder how can that be pre-cautionary, sustainable or even meaningful?

The deficiencies in this book include for instance an absence of (bird) data and few herpetological experts. Due to no data coverage, the adjacent Swedish (bird) data got employed for this Norwegian Red List. Population sizes of many birds were simply taken from BirdLife International (2004; a coarse international reference and already over 8 years old). Moreover, an ex-

pert group of just one individual contributed the relevant Red List information for amphibians and frogs, nation-wide. Authors state that "...species die out without our being aware". But this is not so surprising, given that only 2,500 marine species got evaluated out of 6,000 multicellular species known to occur for this Norwegian Red List.

Red Lists do not really report unhealthy population explosions, like the recent skua populations in Arctic Norway. And these indicators of a rather unnatural state are not provided here for a better context, unfortunately. However, some of the text deals with introduced species like musk ox, wild boar and fallow deer. Disease as a causal factor to listing is not well covered in the text. But for underlying causes, this book widely misses the impact of the Norwegian life-style, as well as the inherent economic growth conflict (as it is typical for most IUCN publications). Clear-cut logging, as well as selective cutting, is thought to have negative effects on species and habitats. Pollution (contamination) makes for the second-next cause, but the concept and term of a 'toxic tort' (=many interacting contaminations with a low concentration) still is virtually ignored (but widely known to occur, e.g., in Norwegian polar bears, some seals, fish and seabirds). Terrestrial and aquatic fertilization is reported as a leading cause for threatened and near- threatened species. Acidification is also mentioned as a bold problem, e.g., acid rain (but not for coastal waters yet). Besides the regular 'development' problems, 30% of the lakes have also been lost, affecting amphibians dramatically. Seabirds are reported to suffer from predation by mink (via population range increases), from fisheries, and drowning in fishing gear (human pursuit is not mentioned though). Impacts of wind parks and coal mining (Svalbard) are virtually not discussed by the Norwegian Biodiversity Information Centre. Whaling is also widely not mentioned as a problem (Norway is a member state of the International Whaling commission but has continued to whale commercially since the IWC ban on commercial whaling in 1986).

While the red list topic is always very fascinating and stimulating indeed, this technical text (provided in Norwegian and in English) makes for dry reading. My officially-bought copy was missing pages 24–33 and double-printed pages 33–40 (evidently some printruns seem to have that error).

As this books re-confirms once again IUCN Red Lists are a rather poor and bureaucratic platform for dealing appropriately with ecosystem, contamination and stressed population issues, and for conservation progress. They are hardly pro-active at all and do not call for a reduction in carbon emissions, for less consumption of natural resources and for a more effective management for instance. But this publication shows us clearly that Norway has widely overcommitted itself (already this Red List effort of 26 committees and 100 members suffers from a stated lack of money, and the future will see even more intense listing pressures). Arguably, and like many other Arctic nations, Norway only has 4.8 million inhabitants but lives already widely over its sustainable carrying capacity.

FALK HUETTMANN

Institute of Arctic Biology, Biology & Wildlife Department, University of Alaska-Fairbanks (UAF), Alaska USA