## Trends in population size and reproduction of Black-throated Loon and Redthroated Loon in Sweden

## Mats O. G. Eriksson

MK Natur- och Miljökonsult, Tommeredsvägen 23, SE-437 92 Lindome, Sweden eriksson.tommered@telia.com

The Nordic countries hold substantial parts of the breeding populations of Black-throated Loon (*Gavia arctica*) and Red-throated Loon (*Gavia stellata*) in Europe. Hence, the "health" of these species in Sweden, Norway and Finland are of utmost importance for their conservation status, also in a wider geographical perspective. The future of both species is in much dependent on the appropriate management of the breeding populations in this part of the world.

Against this background, and in combination with worries for low breeding success and a complex of potential threats, a volunteer-based system for surveys of the recruitment of the two species was launched in 1994, "Projekt LOM".

On the basis of annual surveys, 1994-2012, our current assessments can be summarised:

## BLACK-THROATED LOON

Population size: Long-term increase of the population size, with an indication of levelling-out during the last 10-15 years (data from The Swedish Bird Survey).

Breeding performance: During the last 10 years (approximately), the assessments of breeding performance have been based on data from ca 4 % of the national population. Average breeding success was 0.42-0.46 large chicks per pair and year, on the same level in whole Sweden and enough to compensate for the annual mortality. But there is an indication of a negative trend in South-central Sweden (Svealand), linked to a decreased proportion of broods with two large chicks.

## **RED-THROATED LOON**

Population size: Long-term increase of the population size, related to northern Sweden, while there is a non-significant indication of a decline in southern Sweden (data from The Swedish Bird Survey).

Breeding performance: During the last 10 years (approximately), the assessments of breeding performance have been based on data from ca 6 % of the national population. Average breeding success was 0.69 large chicks per pair and year in South and South-central Sweden; judged to be too low to compensate for the annual mortality, and linked to a decreased proportion of broods with two large chicks in South Sweden (Sydsvenska Höglandet). In North and North-central Sweden, average breeding success was 0.90 large chicks per pair and year; enough to compensate for the annual mortality and on the same level for inland and coastal breeders, foraging in freshwater and marine habitats, respectively.