

Red-necked Grebe (*Podiceps grisegena*)

(6 subspecies/populations; 1 within plan area)

Conservation Concern Category:

Moderate

Population Trend (PT)

P. grisegena holboellii—unknown (Delany and Scott 2002)

“no clear trend...extensive drainage of wetlands likely reduced populations...currently probably stable...declines in local populations in heart of breeding range noted...Alaska survey data suggested local breeding population declining at 10%/yr...analysis of CBC data from 1958-1980 indicated increase in winter populations...” (Stout and Nuechterlein 1999)

“relatively stable, but a moderate decline in recent years in several countries has been recorded...” (O'Donnel and Fjeldsa 1997)

“small expansion of breeding range noted in S Ontario (current Ontario Breeding Bird Atlas in prep.) and West Central Minnesota where some expansion out onto the prairie currently (2004, 2005) underway...(R. Russell, pers.comm.)

Canadian BBS trends (Sauer et al. 2005) indicates the population has been stable over the last 20 years (acknowledging the limitations of BBS for this species)

Analysis of the last 25 years CBC data for Canada and the US (National Audubon Society 2005) suggests the population may be increasing.

The number of breeding Red-necked Grebes in Northwest Territories from 1986 - 1996 appeared stable (Fournier and Hines 1998).

In a population study near Yellowknife in the Northwest Territories from 1991 to 2003, there was a slight non-significant ($p=0.3$) increase in the yearly abundance of adult Red-necked Grebes during the breeding season. During the same time period, there was a slight non-significant reduction in productivity, as measured by the average number of adults and young counted during July and August surveys ($p=0.4$) and the number of ponds on which broods were raised ($p=0.2$) (CWS unpub. data)

It is estimated that greater than 70% of the population resides in Canada. BBS and CBC data indicate the population is either stable or increasing in Canada; no data to suggest that the population is decreasing in Canada. Except for a few local or regional instances, available data indicates that Red-necked Grebe populations are stable or increasing in North America. [Canadian Review Team]

PT FACTOR SCORE=3

Population Size (PS)

P. grisegena holboellii—45,000 total individuals (Delany and Scott 2002; Jehl 2001)

“breeding densities were 1.6 pairs/km² (Northwest Territories)...in Alaska densities (birds/km²) were 0.05, 0.18, 0.08, 0.02, 0.05, 0.14, 0.02-0.04, 0.06...NA population likely exceeds 45,000 individuals...species greatly underrepresented by CBC...” (Stout and Nuechterlein 1999)

“no population estimates for *P. g. holboellii*, but this subspecies probably numbers greater than 100,000 birds...” (O'Donnel and Fjeldsa 1997)

PS FACTOR SCORE=3

Threats to Breeding Populations (TB)

“high levels of OCs, mercury and other heavy metals often found in adults, eggs, young...wintering sites source of most bioaccumulated contaminants...substantial eggshell-thinning, inviable eggs, and high mortality during hatching are attributed primarily to high OC levels in eggs...major source of habitat loss due to draining of potholes for farming, road-building, and development...also destruction of emergent vegetation near lakefront properties...decreasing water levels due to deforestation around wetlands... erosion from overgrazing and cultivation...sensitive to disturbance during nesting...raccoons major egg predators...” (Stout and Nuechterlein 1999)

“local impacts could include pollution, habitat loss, degradation and increased disturbance...” (O'Donnel and Fjeldsa 1997)

Most of the threats identified in the BNA are potential threats. There is no evidence to suggest that these threats could result in a significant potential risk to the population. No potential threats have been identified in the Northwest Territories where the “breeding population appears to be a significant component of the national (Canadian) population for this species (Fournier and Hines 1998).[Canadian Review Team]

TB FACTOR SCORE=3

Threats to Non-breeding Populations (TN)

“vulnerable to oil spills...commercial gill-nets are a potentially important source of mortality...marine pollution problems affect main wintering areas...long term effects of oil spills on habitat quality may contribute to declines in local wintering populations...” (Stout and Nuechterlein 1999)

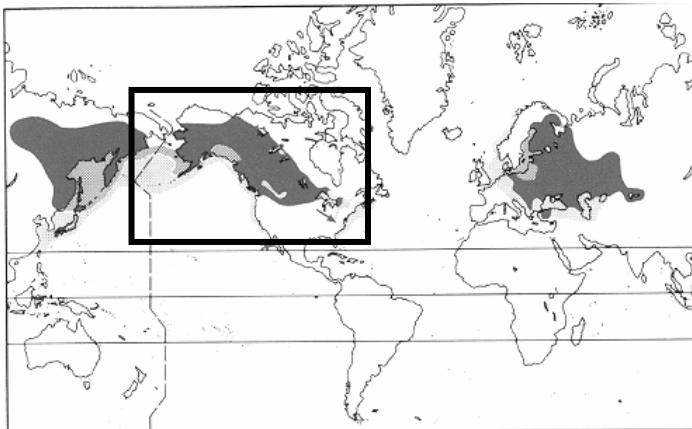
“vulnerable to oil spills in its winter quarters...” (O'Donnel and Fjeldsa 1997)

Gill net mortality (cited in BNA; Marshbird Workshop 2005)

We would consider leaving this score as a 4, and would ask if the Marine group could provide any documented evidence to suggest that it should be a 5 (proof of the scale and extent/impact that gill-nets and other threats are having on this species.)[Canadian Review Team]

TN FACTOR SCORE=4

Global Range (Harrison 1983; inset=plan area range)



MAP 33 RED-NECKED GREBE Text p.217 Plate 7

Breeding Distribution (BD)

P. grisegena holboellii—N USA, Canada, Alaska (Delany and Scott 2002)

3,083,900 km² (plan area distribution; estimated from range maps)

BD FACTOR SCORE=3

Non-breeding Distribution (ND)

P. grisegena holboellii—Pacific & Atlantic North America (Delany and Scott 2002)

5,401,500 km² (plan area distribution; estimated from range maps)

ND FACTOR SCORE=3

Literature Cited:

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