

# Podilymbus podiceps

*This species is complete.*

June 23, 2014 by Amber Lankford

Author(s) Expertise:

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<b>Sensitivity Factor</b>	<b>Sensitivity 1 - 7 (one being least sensitive, seven being most sensitive)</b>	<b>Confidence 1 - 5 (one being least sensitive, five being most sensitive)</b>
Generalist/Specialist	2 Medium-Low	3 Fair
Physiology	2 Medium-Low	3 Fair
Life History	4 Medium-High	4 Good
Habitat	7 Extremely High	5 Very Good
Dispersal Ability	1 Low	2 Poor
Disturbance Regimes	3 Medium	3 Fair
Ecology	3 Medium	3 Fair
Non-Climatic	5 High	3 Fair
Other (weight)		

Sensitivity Score : 49 Medium

## Sensitivity Score

$100 * [(0.5 * (\text{Dispersal Distance} + \text{Dispersal Barriers}) + \text{Disturbance Regimes} + (0.5 * \text{Generalist/Specialist}) + \text{Physiology} + (0.5 * \text{Life History}) + \text{Sensitive Habitats} + \text{Ecology} + \text{Non-Climatic Stressors} + (\text{Other} * \text{Weight}) / 49 + (7 * \text{Weight})]$

Note: if Sensitive Habitats are identified, this factor automatically gets a value of seven, otherwise it remains zero.

Confidence Score : 2 Poor

## Confidence Score

The Confidence Score is an average of the Confidence column above.

Overall User Ranking: 3 Medium

**Common Name:**

Pied-billed grebe

**Is this Species completed:**

Yes

Taxonomy

This is a description of the whole group

**Scientific Name:**

Podilymbus podiceps

**Geography:**

PNW

**Realm:**

Freshwater

**Kingdom:**

Animal

**Phylum:**

Chordata

**Class:**

Aves

**Order:**

Podicipediformes

**Family:**

Podicipedidae

**Genus:**

Podilymbus

**Global Rank:**

G5 (1996)

**Rounded Global Rank:**

G5 - Secure

**IUCN:**

Least Concern ver 3.1 - 2012

**US Endangered Species Act Code:**

Not listed

**Species Element Code:**

ABNCA02010

**Generalist/Specialist****Broadly, where does this species fall on the spectrum of generalist to specialist? :**

2

**Confidence in your assessment of the degree to which the species is a generalist or specialist:**

3 Fair

**Comments:**

Opportunistic - consumes primarily fishes, crustaceans, and aquatic insects. Stout bill allows this species to have a broad dietary spectrum.

**Citations:**

Muller, Martin J. and Robert W. Storer. 1999. Pied-billed Grebe (*Podilymbus podiceps*), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: <http://bna.birds.cornell.edu/bna/species/410>

**Physiology****Species' physiological sensitivity:**

2

**Confidence in how physiologically sensitive the species is to climate change:**

3 Fair

**Please specify whether or not this species is physiologically sensitive to one or more of the following:**

temperature

**Please describe any specific physiological sensitivities:**

Chicks are extremely susceptible to chilling for 2 weeks post hatching

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**Life History****Species' reproductive strategy:**

4

**Confidence in your assessment of the species' reproductive strategy:**

4 Good

**Is the species polycyclic, iteroparous, or semelparous?:**

Iteroparous (reproduces in successive cycles--characteristic of K-strategists)

**Average length of time to reproductive maturity:**

1 year

**How many surviving young can an individual produce during a single reproductive event under optimal conditions?:**

4-5

**How many reproductive events can an individual undergo in a single year under optimal conditions?:**

1

**Comments:**

2 broods are possible, but it is unclear whether 2 broods are a normal occurrence

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Sensitive Habitats

**Depends on the following sensitive habitat types:**

Coastal Lowlands/Marshes/Estuaries/Beaches

**Confidence in whether the species depends on the listed sensitive habitat types:**

5 Very Good

**Comments:**

Breeds on seasonal or permanent ponds. Associated with dense stands of emergent vegetation with nearby open water. Uses similar habitats for migration and non-breeding as well as wetlands.

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Muller, Martin J. and Robert W. Storer. 1999. Pied-billed Grebe (*Podilymbus podiceps*), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: <http://bna.birds.cornell.edu/bna/species/410>

Dispersal Ability

**Maximum annual dispersal distance:**

>100 km

**Confidence in maximum annual dispersal distance:**

3 Fair

**Within the context of dispersal distance above, do barriers to dispersal exist?:**

1 None

**Confidence in barriers to dispersal exists:**

1 Very Poor

**Citations:**

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Disturbance Regimes

**How sensitive is this species to one or more disturbance regimes:**

3 somewhat sensitive

**Confidence in how sensitive is this species on one or more disturbance regimes:**

3 Fair

**Please check all disturbance regimes upon which the species is sensitive:**

Flooding

Drought

Pollution

**Please describe the disturbance regimes upon which the species is sensitive (frequency, timing, severity, duration):**

Flooding submerges emergent vegetation and may flood nests. Drought impacts the persistence of seasonal and semi-permanent wetlands, particularly in prairie regions.

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Ecological Relationships

**Please specify which of the following (if any) are sensitive to climate change for this species:**

habitat

**Confidence in how sensitive the species is to other effects of climate change on its ecology:**

3 Fair

**Which types of climate and climate-driven changes in the environment affect these aspects of the species' ecology?:**

precipitation

**How sensitive is this species? ecological relationships to the effects of climate**

**change?:**

3

Interacting non-climatic stressors

**To what degree do other, non-climate-related threats, to the species make it more sensitive to climate change?:**

5

**Confidence in the degree to which non-climate-related threats affect the species' sensitivity to climate change:**

3 Fair

**Please check all of the stressors that make the species more sensitive to climate change:**

habitat loss or degradation

direct human conflict (including harvesting)

pollution

**Comments:**

DDT and other pesticides have been known to cause mortality. Also known to collide with human structures such as TV towers and lighthouses (nocturnal flights). Loss of wetlands decreases the amount of both breeding and non-breeding habitat available for this species.

Overall User Ranking

**In your opinion, how would you rank the overall sensitivity of this species to climate change?:**

3

**Confidence in your overall assessment of the sensitivity of this species to climate change:**

3 Fair

[Print species as a PDF](#) <sup>[1]</sup>

**Source URL (retrieved on 2017-06-23 15:24):** <http://climatechangesensitivity.org/species/podilymbus-podiceps>

**Links:**

[1] <http://climatechangesensitivity.org/printpdf/976>