# California Wildlife Habitat Relationships System

# California Department of Fish and Wildlife California Interagency Wildlife Task Group

NORTHWESTERN GARTERSNAKE Thamnophis ordinoides

Family: NATRICIDAE Order: SQUAMATA Class: REPTILIA

R064

Written by: S. Morey Reviewed by: T. Papenfuss Edited by: R. Duke, S. Granholm

### DISTRIBUTION, ABUNDANCE, AND SEASONALITY

The northwestern gartersnake is restricted to the northwestern corner of the state where it is most common in wet meadow, lacustrine, fresh emergent wetland and slow-moving riverine habitats, and in clearings in dense forests. It is also found in forests and grassy areas some distance from water. It is active from early spring through summer, and occasionally into the fall (Fitch 1940, Fox 1951, Hebard 1951, Stebbins 1954).

## SPECIFIC HABITAT REQUIREMENTS

Feeding: The northwestern gartersnake eats slugs (Ariolimax and Deroceras), plethodontid salamanders (Aneides ferreus, Plethodon elongatus and P. dunni), frogs (Rana aurora and R. boylei), and earthworms (Hebard 1951, Stebbins 1954).

Cover: On land this snake uses dense vegetation, logs and occasionally rocky areas for shelter. In the water it dives to the bottom and takes cover under banks or snags.

Reproduction: Young are live-born and require a quiet, protected place for birth but nothing else is known about reproductive requirements.

Water: This snake is always found near streams, ponds, lakes, fresh emergent wetlands, meadows or seeps and is most abundant in direct association with water (Stebbins 1954). Permanent water is probably a physiological as well as ecological requirement.

Pattern: The northwestern gartersnake is found in a variety of aquatic and semiaquatic habitats in close association with forests where slugs, earthworms and amphibian prey can be found.

#### SPECIES LIFE HISTORY

Activity Patterns: This snake is diurnal, actively foraging and basking near water throughout the day. It is active from mid-March to mid-October (Hebard 1951).

Seasonal Movements/Migration: This snake is not known to migrate.

Home Range: Individuals probably do not move far from the body of water they inhabit.

Territory: No data.

Reproduction: Courtship has been observed from late March to mid-April. The young are live-born about 9 weeks later. From 3 to 15 young are born in each brood with an average of 8.8 (Hebard 1951, Stebbins 1954).

Niche: Gartersnakes are preyed upon by northern harriers and probably other raptors, and possibly herons. They may also be taken by skunks and opossums. They defend themselves with a foul-smelling fluid from the anal scent glands and this may inhibit some predation.

#### REFERENCES

Fitch, H. S. 1940. A biogeographical study of the Ordinoides Artenkreis of the garter snakes (genus Thamnophis). Univ. Calif. Publ. Zool. 44:1-150.

Fox, W. 1951. Relationships among the garter snakes of the Thamnophis elegans rassenkreis. Univ. Calif. Publ. Zool. 50:485-530.

Hebard, W. B. 1951. Notes on the life history of the Puget Sound garter snake, Thamnophis ordinoides. Herpetologica 7:177-179.

Kirk, J. J. 1979. Thamnophis ordinoides. Cat. Amer. Amphibians and Reptiles 233.

Stebbins, R. C. 1954. Amphibians and reptiles of western North America. McGraw-Hill, New York. 536pp.

R064

Life history accounts for species in the California Wildlife Habitat Relationships (CWHR) System were originally published in: Zeiner, D.C., W.F.Laudenslayer, Jr., K.E. Mayer, and M. White, eds. 1988-1990. California's Wildlife. Vol. I-III. California Depart. of Fish and Game, Sacramento, California. Updates are noted in accounts that have been added or edited since original publication.