

## Land snails and slugs - Order Stylommatophora

Abundance: Unknown

Status: NSSU

NatureServe: G5 SNR

Population Status: Unknown

Limiting Factor: Unknown

Comment: None

### Introduction

Land snails and slugs are molluscs in the Order Stylommatophora. Snails have a calcareous shell that spiral in characteristic ways used to identify gastropod families (Burch and Pearce 1990). The shell protects the soft tissues of snails, which consist of the foot, head, visceral mass and mantle. Slugs are gastropods where the shell is reduced, absent or internal. About 1,000 land snails and slugs inhabit most terrestrial habitats across North America north of Mexico. NatureServe (2016) lists 2,091 species and subspecies of terrestrial mollusks in the United States and Canada. Of these terrestrial mollusks, 35% are considered critically imperiled or imperiled (G1/T1 or G2/T2). Land snails and slugs eat plants (living and dead), litter, wood and dead animals (Speiser 2001). Terrestrial gastropods typically mate and reproduce during wet, cool periods of the year when they are seasonally active (Burch and Pearce 1990). During unsuitable times, land snails and slugs aestivate, a time of inactivity where they seal their shell (snails) or use other methods to retain moisture. In Wyoming, most land snails are active during late spring and early summer, and aestivate the rest of the year depending on conditions. Fifty-four terrestrial gastropod species and subspecies are known from Wyoming (NatureServe 2016). Of these, 13% are considered critically imperiled or imperiled (G1/T1 or G2/T2). *Catinella wandae*, *Oreohelix strigosa berryi*, and *Oreohelix strigosa cooperi* are considered imperiled and *Oreohelix pygmaea*, *Vertigo idahoensis* and *Vertigo binneyana* are considered critically imperiled. *Oreohelix strigosa cooperi*, *Oreohelix pygmaea*, and *Oreohelix carinifera* were petitioned for listed under the Endangered Species Act and received negative 90-day findings. *Oreohelix strigosa cooperi*, *Discus shimeki*, *Vertigo arthuri*, and *Vertigo paradoxa* are Forest Service Region 2 species of local concern.

### Habitat

Land snails and slugs live in most terrestrial habitats, including soils, caves, litter, vegetation, rocks, epiphytes and tree canopies (Heller 2001). However, terrestrial gastropods need shelter, moisture, food, and calcium carbonate (to make shells) to survive (Burch and Pearce 1990). Microhabitats for land snails and slugs can be found near water (springs, streams, or lakes), on north-facing hillsides or under vegetation.

### Problems

- h Lack of basic knowledge of land snails and slugs in Wyoming including what species live in the state, how they are distributed and their ecology.

### Conservation Actions

- h Conservation concerns for some land snails have grown due to habitat disturbances such as logging and grazing, coupled with limited dispersal abilities of these animals (Anderson 2004, Anderson 2005, NatureServe 2016).
- h A general description of land snail distributions and ecology is needed in Wyoming.

### Monitoring/Research

Monitoring plans for some species may be needed, but must be based on baseline distribution and ecology.

### Recent Developments

None.

### References

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SOURCE: Digital maps of ranges for Wyoming Species of Greatest Conservation Need: April 2010. Wyoming Game and Fish Department. A range map is unavailable for the taxa because distribution and ecology are poorly known in Wyoming.