CAPS Datasheets provide pest-specific information to support planning and completing early detection surveys.

Terrestrial Snails and Slugs Datasheet

Approved Methods for Pest Surveillance*:

For the current approved methods and guidance for survey and identification, see Approved Methods for Pest Surveillance (AMPS) pest page on the CAPS Resource and Collaboration website, at https://approvedmethods.ceris.purdue.edu/. These terrestrial snail and slug taxa are targeted in *Plant Production*, *Previous Finds*, and *Shipping Container* pathway-based surveys. New introductions of terrestrial snails and slugs will likely be related to trade, commerce, and/or other human-assisted movement.

Targeted Taxa for survey

Table 1. Terrestrial Slugs or Semi-slugs

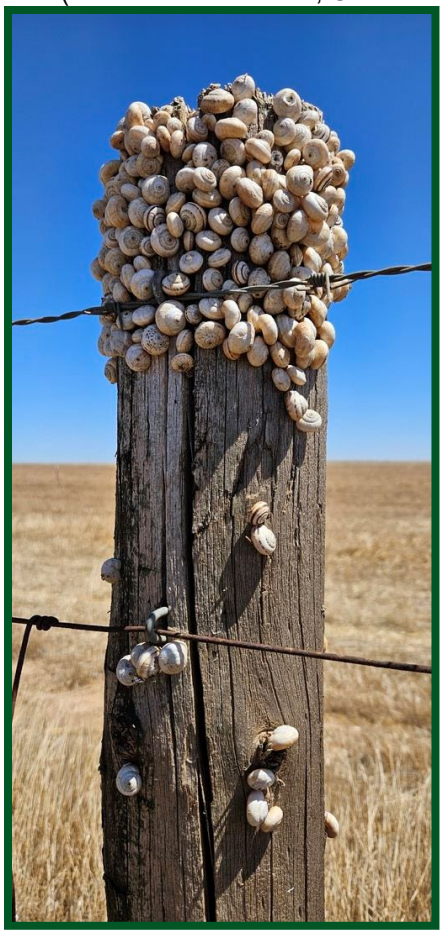
Targeted Taxa	Images
Arion spp. *A. ater ater* *A. ater rufus* *A. ater ruber* *A. vulgaris* potential hybrids	 *A. ater* (Source: Charles J. Sharp, CC-4.0)  *A. ater rufus* (Source: Guillaume Brocker, CC-3.0)

Targeted Taxa	Images
Veronicellidae *Laevicaulis alte* *Sarasinula spp.* *Semperula spp.* *Veronicella spp.* *Leidyula spp.* *Belocaulus angustipes*	 *L. alte* (Source: Michal Maňas, **CC-2.5**)  *V. cubensis* (Source: D. Robinson, USDA-APHIS-PPQ)
Parmarion spp. *P. martensi* *P. intermedius*	 *P. martensi* (Source: Adiel Balanza, CC-4.0)

Table 2. Small Terrestrial Snails

Targeted Taxa	Images
Acusta spp.	 *Acusta* spp. shell (Source: James Zablotny, USDA–APHIS–PPQ)  *A. ravida* (Source: Dallin Kohler, CC-4.0)
Cochlicella spp.	 *Cochlicella conoidea* shell (Source: Patrick Marquez, USDA-APHIS-PPQ)  *Cochlicella acuta* (Source: Rolf Lawrenz, CC-4.0)

Targeted Taxa	Images
Theba pisana	 *T. pisana* shell (Source: Patrick Marquez, USDA-APHIS-PPQ)
Cathaica fasciola	 *C. fasciola* shell (Source: Charles Olsen, USDA-APHIS-PPQ)  Aggregating *C. fasciola* (Source: Fangchen, CC-4.0)

Targeted Taxa	Images
Cernuella spp.	 *C. virgata* shell (Source: D. Robinson, USDA-APHIS-PPQ)  Aggregating *C. virgata* (Source: Whittie, CC-4.0)

Targeted Taxa	Images
Monacha spp. *M. cantiana* *M. ocellata* *M. cartusiana* *M. syriaca*	 *Monacha* spp. shell (Source: Patrick Marquez, USDA-APHIS-PPQ)  *M. syriaca* (Source: Greg Barman, USDA-APHIS-PPQ)

Table 3. Giant African Snails

Targeted Taxa	Image
Achatinidae *Lissachatina fulica* *Achatina achatina* *Archachatina marginata* *Limicolaria aurora* *Limicolaria flammea*	 *L. fulica* (Source: Trace Hardin, USDA-APHIS-PPQ)

Sample Collection Instructions

1. **WEAR GLOVES**. Because of the pathogens and parasites that most snails and slugs can transmit, personnel should wear gloves when handling any specimens. If gloves are not available, use other tools to manipulate the mollusk. Always immediately disinfect hands with hot, soapy water or hand sanitizer.
2. Screen samples prior to submission. Sort out debris and non-mollusk organisms.
3. Collect snails and/or slugs in a jar/vial and euthanize them by covering with ethanol (80% or above)

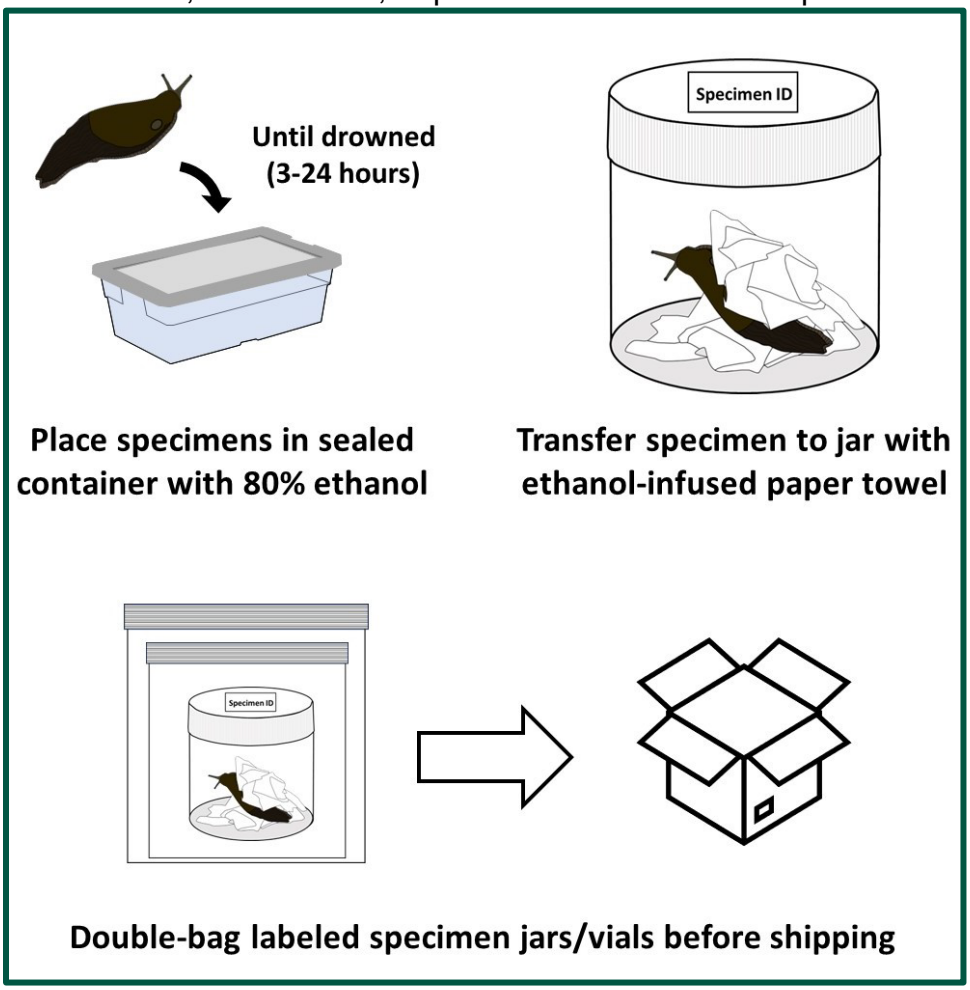
- Note: It is recommended that you collect multiple specimens of the snail or slug if possible. Prioritize collecting and sending the largest specimens available for each putative species/morphotype.

4. After snails or slugs are fully covered in ethanol for at least a few hours, the ethanol can be drained and replaced with paper towel material inside the jar/vial. Add more ethanol to just soak the paper towel. Add another piece of loose paper towel (to prevent specimen movement during shipping).

- Note: Mailing companies have regulations against large volumes of ethanol, so the ethanol-infused paper towel reduces the volume.

5. Place jar/vial in a double plastic bag (zip-lock or equivalent) and protect for mailing.

6. Label specimens with the date, exact location (GPS coordinates), and details on the substrate, microhabitat, or plant hosts on which the specimen was found.



7. Mail the jar(s)/vial(s) to the Malacology lab via UPS or FedEx at the following address:

   Attn: Drs. Francisco Borrero and Morgan Bullis
   Malacology Identification Specialist
   USDA-APHIS-PPQ
   Academy of Natural Sciences
   1900 Benjamin Franklin Parkway
   Philadelphia, PA 19103-1101
   Phone: 215-847-3271

8. It is recommended that you email PPQNISNTMalacology@usda.gov to let them know that a sample is on the way and that you liaise with the appropriate USDA-APHIS-PPQ officer in your state/region to ensure that any specimens submitted for identification by NIS are accompanied by the required Agricultural Risk Management (ARM) System form. If assistance is needed to find the appropriate officer in your region, please contact PPQNISNTMalacology@usda.gov.

USDA-APHIS-PPQ-ST staff developed this datasheet. Cite this document as:

PPQ. 2026. Cooperative Agricultural Pest Survey (CAPS) Datasheet for Terrestrial snails and slugs. United States Department of Agriculture, Animal and Plant Health Inspection Service, Plant Protection and Quarantine (PPQ), Raleigh, NC.

Versions

April 2026: Datasheet completed (Version 1)