**Data paper**

**Title: New records of the land and freshwater molluscs of Northern Spain**

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“Land and freshwater molluscs of Northern Spain” is an occurrence dataset containing 222 observations of 75 different taxa of land and freshwater molluscs encountered in Northern Spain (Vízcaya, Cantabria and Asturias). Various sites were inspected in a period between 2004 to 2019. The aim is to contribute to the knowledge on the ecology and distribution of these species on the island such that it may aid conservation and research of these organisms in the future. The dataset is published as a standardized Darwin Core Archive and includes for each observation a stable occurrenceID, scientific name, date, and location of the observation, as well as info on lifeStage and organismQuantity, and supplementary remarks on the determination and the observation itself. We have released this dataset to the public domain under a CC0 1.0 Universal (CC0 1.0) Public Domain Dedication (https://creativecommons.org/publicdomain/zero/1.0/).

**Abstract**

**Keywords**

snails, bivalves, Mollusca, terrestrial, freshwater, Northern Spain, occurrence, observation, open data, data paper

**Rationale**

**Taxonomic coverage**

Land and freshwater molluscs do not comprise a monophyletic taxonomic group, but are all mollusc species that live in respectively land and freshwater habitats. On land, only gastropods occur (class Gastropoda, snails and slugs) and in freshwater, both gastropods as bivalves (class Bivalvia) occur. The dataset includes 222 observations of 75 taxa belonging to 52 genera and 36 families.

Determination was mainly done with Cadevall & Orozco (2016) and Welter-Schultes (2012) and for species with a wider, European, distribution also the following works were consulted: Cameron (2008), Glöer (2015), Horsák (2013), Jansen (2015). Finally, the following articles were consulted as well: Arconada et al. (2007) and Rolán et al. (2009) for *Alzoniella*, Gittenberger & Bank (1996) for *Pyramidula*, Gittenberger (1973) for *Chondrina*, Raven (1990) for *Obscurella*, Suárez & Quiñonero Salgado (2017) for *Plentuisa vendia*, Prieto et al. (2020) for *Oestophora*, Suárez et al. (2019), Elejalde et al. (2009) and Caro et al. (2019) for *Pyrenaearia* (see also Langeraert, 2017), and De Winter (1986) for *Arion urbiae*.

**Taxonomic ranks**

**Kingdom:** Animalia  
**Phylum:** Mollusca  
**Class:** Gastropoda  
**Families:** Agriolimacidae, Arionidae, Azecidae, Chondrinidae, Clausiliidae, Cochlicopidae, Discidae, Ellobiidae, Elonidae, Enidae, Ferussaciidae, Gastrodontidae, Geomitridae, Helicidae, Hydrobiidae, Hygromiidae, Lauriidae, Lymnaeidae, Megalomastomatidae, Neritidae, Oxychilidae, Physidae, Planorbidae, Pomatiidae, Pristilomatidae, Punctidae, Pupillidae, Pyramidulidae, Tateidae, Testacellidae, Trissexodontidae, Truncatellinidae, Valloniidae, Vertiginidae, Vitrinidae  
**Species:** *Abida vasconica, Aegopinella nitidula, Alzoniella* spec.*, Ancylus fluviatilis, Arion (Mesarion) urbiae, Arion (Arion)* spec.*, Arion (Kobeltia)* spec.*, Azeca goodalli, Cecilioides acicula, Cepaea nemoralis, Cernuella aginnica, Chondrina cliedentata, Chondrina kobelti, Clausilia bidentata, Cochlicella acuta, Cochlicella barbara, Cochlicopa lubrica, Cochlicopa lubricella, Cornu aspersum, Deroceras* spec.*, Discus rotundatus, Elona quimperiana, Galba truncatula, Gastropoda* spec.*, Helicella itala itala, Helicella pampelonensis, Helicella valdeona, Helicella* spec.*, Hygromia limbata,* Hygromiidae spec.*, Lauria cylindracea, Leucophytia bidentata, Macrogastra rolphii digonostoma, Mengoana jeschaui, Merdigera obscura, Obscurella asturica, Obscurella bicostulata, Obscurella crassilabrum, Obscurella hidalgoi, Obscurella asturica/hidalgoi, Obscurella* spec.*, Oestophora silvae, Oestophorella buvinieri, Oligolimax annularis, Oxychilus navarricus navarricus, Paralaoma servile, Peringia ulvae, Physella acuta, Plentuisa vendia, Pomatias elegans, Potamopyrgus antipodarum, Potamopyrgus antipodarum* f.*carinata, Pseudomelampus exiguus, Pupilla bigranata, Pupilla muscorum, Pyramidula pusilla/umbilicata, Pyrenaearia cantabrica, Pyrenaearia schaufussi, Testacella maugei, Theba pisana, Theodoxus fluviatilis, Trochulus hispidus, Truncatellina callicratis, Vallonia costata, Vallonia excentrica, Vallonia pulchella, Vertigo pygmaea, Vitrea contracta, Vitrea subrimata, Vitrea* spec., *Vitrina pellucida, Xerosecta cespitum, Xerotricha apicina*

**Class:** Bivalvia  
**Families:** Sphaeriidae  
**Species:** *Euglesa* aff. *globulare, Euglesa* cf. *casertana*

**Geographic coverage**

The dataset comprises three trips taken to Northern Spain (Vízcaya, Cantabria and Asturias) by the first author and four extra observations based on shells bought on a shell show (WL:SNAIL:ES:OCC:00000 - WL:SNAIL:ES:OCC:00003).

**Bounding box**

West: -4.989424; East: -2.637003; North: 43.46482086; South: 43.064564

**Temporal coverage**

2004-08-18 to 2019-09-16

**Methodology**  
**Sampling description**

Sampling was done ad random along random routes. Locations were not predefined, but some regions were specifically visited because of known species richness or endemics occurrence. At site, observations were incidental, but microhabitats or elements that were thought to be favourable for snails or were given more attention (e.g. dead wood, north facing slopes etc.). Collection of specimens was mainly done by hand on sight. In some cases, a soil sample was taken that was later examined at home.

Individuals were observed as living snails or empty shells. Juveniles were treated as individuals with a shell that lack adult characteristics, like an underdeveloped peristome or the presence of a keel that is not present in adult shells. Following this practice, subadult specimen were often classified as juveniles.

**Dataset  
Dataset description**

The following Darwin Core terms (<https://dwc.tdwg.org/terms/>) are used in the dataset:

**Object name:** Land and freshwater molluscs of Northern Spain

**Format name:** Darwin Core Archive format

**Format version:**

**Character encoding:** UTF-8

**Language:** English

**License:** <https://creativecommons.org/publicdomain/zero/1.0/>

**Usage norms:**

**Publication date:**

**Distribution:**

**DOI:**

**Data records:**

**Additional information**

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