

New data about *Mustela putorius* in the Campiña region of Seville (SW Spain)

Nuevos datos sobre *Mustela putorius* en la Campiña de Sevilla (SO España)

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The European polecat *Mustela putorius* Linnaeus, 1758, is a species widely distributed in the occidental Palearctic, from the Iberian Peninsula to the Urals (Wolsan 1993), in addition there are populations of disputed taxonomic identity in the Rif region of Morocco (Griffiths & Cuzin 2013) and in adjacent Algeria (Ahmim 2013), traditionally thought to be an introduction, but recent fossils discoveries suggest us a possible native origin (Skumatov *et al.* 2016). In Spain it is present over all the territory but the distribution is patched, being apparently more common in Galicia, Asturias and Castilla y León. In Andalusia, *M. putorius* is also scattered and patched around all the region (Virgós 2007). In Seville the situation is similar with mostly old records around the Aljarafe region and some in the Bajo Guadalquivir, Guadalcanal or Estepa.

In this note we present records included in the web Observation.org, all from a new detected area for this species in the province of Seville, the Campiña region. These new records come from the municipalities of Osuna, Écija, Lantejuela, Arahal, Puebla de Cazalla, Los Molares and Marchena

(Table 1). All records are road kills and in Table 1 we show data about date, municipality, UTM square (10 x10 km) and observers. In the Figure 1 we show the distribution of species according the Spanish Mammals Atlas (Virgós 2007) and the new records.

Regarding the conservation, Virgós *et al.* (2007) identifies several threats for this species in Spain, including reduction of rabbits *Oryctolagus cuniculus* populations, road kills, habitat destruction and poison use. A local threats for this species seems to be road kills (as our records indicate, Fig. 2). Other risk could be the use of poison (Junta de Andalucía 2015), although we have not data about the affection of this problem in the species. *M. putorius* seems to be in decline in other places of Iberian Peninsula, like in Catalonia (Salvador *et al.* 2017), for this reason and the fact that it is difficult to obtain observations for this specie, we consider these records important in order to identify the threats and conservation tasks around it.

This note shows the presence of *M. putorius* in a previously unrecorded area, the Guadalquivir

Table 1. Records of *Mustela putorius* in the province of Seville.

| Date | Municipality | Coordinates | Observer |
|------------|--------------|-----------------------------------|--------------------------------|
| 22-06-2017 | Arahal | 30S 271091.48 m E, 4126380.02 mN | Rodríguez, E.J., Salcedo, F.J. |
| 16-05-2016 | Marchena | 30S 287609.44 m E, 4134823.00 m N | Cortés, I. |
| 09-06-2014 | Osuna | 30S 296502.32 m E, 4131657.56 m N | Rodríguez, E.J. |
| 07-03-2018 | Osuna | 30S 312395.19 m E, 4121517.18 m N | Rengel, J. |
| 27-07-2016 | Osuna | 30S 312635.96 m E, 4112804m N | Rodríguez, E.J. |
| 06-09-2018 | Los Molares | 30S 265205.91 m E, 4117105.72 m N | Plata, A. |

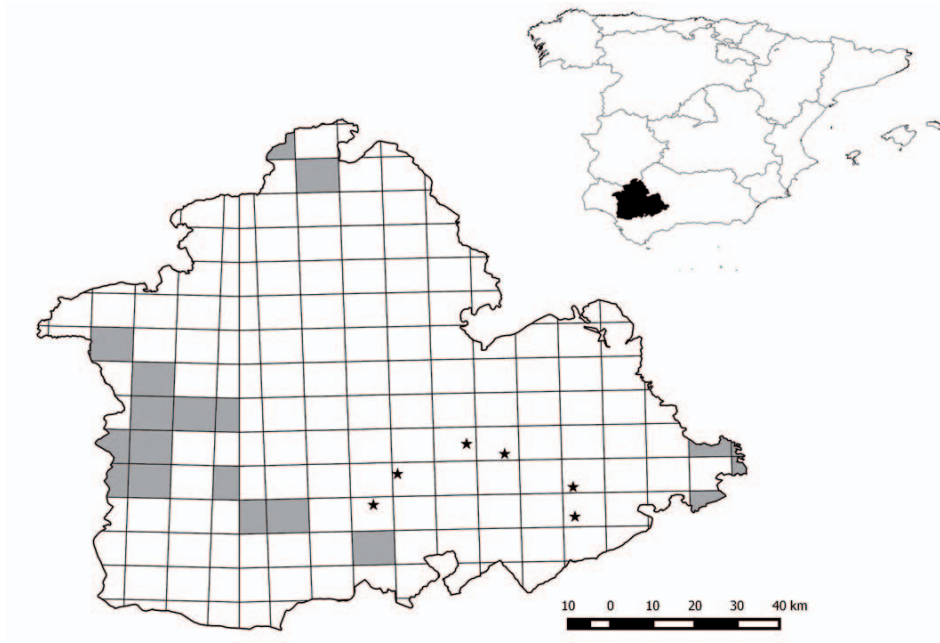


Figure 1. Distribution of *Mustela putorius* in Seville. In pale grey records from Virgós (2007). Black stars, records from this note.



Figure 2. European polecat *Mustela putorius* road killed in Osuna (UTM 30STG93).

Valley in Seville province. Our records also point out an unnatural cause of mortality, the impacts with vehicles. These data are useful for design future studies in the area in order to better know the possible population dynamics and additional threats not detected with our observations. Camera trap surveys and habitat modelling could help to understand these important conservation aspects.

References

- Ahmim M. 2013. Presence of a small population of a polecat-like mustelid in north Algeria, potentially the wild progenitor of Domestic Ferret *Mustela furo*. *Small Carnivore Conservation*, 48: 87-88.
- Ballarín I., Garzón J., Palacios E., Cuesta L. & Castroviejo J. 1980. Sobre la alimentación del turón (*Putorius putorius* L., 1758) en España. *Actas de la I Reunión*

- Iberoamericana de Zoólogos de Vertebrados, La Rábida* 1977. Pp. 625-627.
- Costa M., Fernandes C. & Santos-Reis M. 2014. Ecology and conservation of the polecat *Mustela putorius* (Linnaeus, 1758) in Portugal: a review. *Munibe Monographs. Nature Series*, 3: 79-87. DOI: [10.21630/mmns.2014.3.05](https://doi.org/10.21630/mmns.2014.3.05)
- Griffiths H. & Cuzin F. 2013. *Mustela putorius*. In: J. S. Kingdon & M. Hoffmann (eds), *The Mammals of Africa*, Academic Press, Amsterdam, The Netherlands.
- Junta de Andalucía, Consejería de Medio Ambiente y Ordenación del Territorio (2015). *Estrategia andaluza para el control de venenos y otras amenazas a la fauna catalogada. Ficha resumen actuaciones 2015 en Sevilla*
- Mestre F. M., Ferreira J. P. & Mira A. 2007. Modelling the distribution of the European polecat *Mustela putorius* in a Mediterranean agricultural landscape. *Revue d'Ecologie la Terre et la Vie*, 62 (1): 35-47.
- Observation.org <<https://observation.org/>>. Accessed on 27 June 2018.
- Salvador S., Pou Q., Toniatti E., Llopart X. & Palazón S. 2017. El turón en Cataluña: descifrando las claves de su actual regresión. *Quercus*, 375: 12-19.
- Skumatov D., Abramov A.V., Herrero J., Kitchener A., Maran T., Kranz A. *et al.* 2016. *Mustela putorius*. *The IUCN Red List of Threatened Species* 2016: e.T41658A45214384. DOI: [10.2305/IUCN.UK.2016-1.RLTS.T41658A45214384.en](https://doi.org/10.2305/IUCN.UK.2016-1.RLTS.T41658A45214384.en).
- Virgós E. 2007. *Mustela putorius* Linnaeus, 1758. Pp: 294-296. En: L. J. Palomo, J. Gisbert & J. C. Blanco (eds). *Atlas y Libro Rojo de los Mamíferos Terrestres de España*. Dirección General para la Biodiversidad-SECEM-SECEMU, Madrid.
- Virgós E., Cabezas-Díaz S. & Lozano J. 2007. *Mustela putorius* Linnaeus, 1758. Ficha Libro Rojo. Pp: 297-298. En: L. J. Palomo, J. Gisbert & J. C. Blanco (eds). *Atlas y Libro Rojo de los Mamíferos Terrestres de España*. Dirección General para la Biodiversidad-SECEM-SECEMU, Madrid.
- Wolsan M. 1993. *Mustela putorius* Linnaeus, 1758 – Waldiltis, Europäischen Iltis, Iltis. Pp: 699-769. En: M. Stubbe & F. Krapp (eds). Band 5: *Raubsäuger – Carnivora (Fissipedia). Teil II: Mustelidae 2, Viverridae, Herpestidae, Felidae*. En: J. Niethammer & F. Krapp (eds). *Handbuch der Säugetiere Europas*. Aula Verlag, Wiesbaden.

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