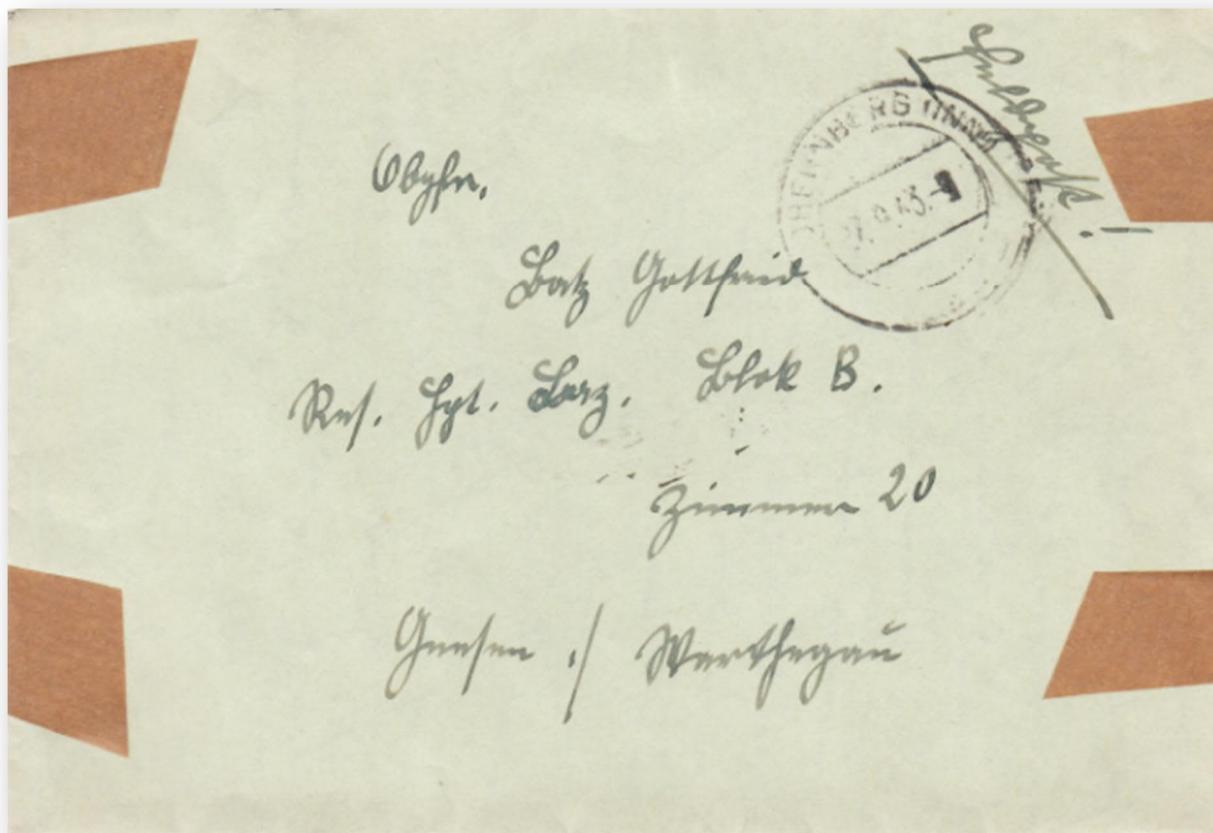


## Worms stop soccer strikers

Thematic philately offers us a large playing field for using imagination to establish a relationship between a cover and an event. Many a juror of a philatelic exhibit will shake his head at the following linkage - but some brain or head gymnastics will certainly do us - mostly older gentlemen - good.



Feldpostbrief von **Obernberg am Inn** nach Gnesen (1943) – © Godfroy Klara Tonicic

Field mail is usually written by soldiers from the "field of honor" to their family members back home in the homeland. Since they are not sure whether the letters will be censored, they often gloss over their own situation. On the other hand - if a soldier has survived the war unscathed - one can now and then hear or read that it was the best years of his life - provided he was lucky enough not to have actually fought at the front.

A football match rarely ends with the death of a participant is or has often been compared to a battle. Moreover, there are sideshows reminiscent of battles - like every now and then, usually after a match, when opposing hooligans attack each other or destroy common property. Some nations fall into economic lethargy after losing a soccer battle.



But I want to report here about another so far lost battle in Obernberg am Inn in Upper Austria: the local soccer club has its dear trouble, it fights against a constant adversary: Myriads of black-headed worms (*Aporrectodea nocturna* EVANS 1946) defecate on the playing field. This worm species is

originally native to Spain and France; it conquered Switzerland and Vorarlberg decades ago. From here it continued its triumphal march eastward. Its eastward spread may have been stopped by the soil and climatic conditions of Pannonia. In any case, the Obernberg football field has the worm in it! It may be that he is only damn annoying there, on the other hand in agricultural steep slopes the worms become a problem because of the ejected excrement balls, because they let vehicles slide off similar to snow. Some meadows are so badly coked and contaminated by worm excrement that farm animals spurn this feed - pressed into bales of silage fodder. But how can a worm that expands its radius of action by about ten meters a year have spread so quickly? The cause lies, as so often, in the actions of man: the spread is via humus supplied by gardeners with their produce; believe it or not, humus is often fetched from far away in large quantities to fill in irregularities in the landscape; just as far as believing in the guilt of fishermen who dispose of surplus worms on the spot in the landscape. The large quantities of worm bait are imported from Canada.



But what can the Obernberg soccer club do: specialists advocate peaceful coexistence, just as Ephraim Kishon advises people who live together with ants under one roof. The Obernberg soccer field has been an open-air test laboratory for thirty years - without success for the groundskeeper, who is naturally particularly annoyed by this. Sand, fertilizer, herbicides, insecticides, biocides and fungicides have been applied. One wag commented that Worm Charming / Grunting was the solution: there is a behavioral explanation for this that has been scientifically studied and verified by biologist and neuroscientist Kenneth C. Catania: Moles produce a frequency of 80-200 hertz when digging and tearing off plant roots. If you sonicate soils with these sounds, earthworms flee to the surface. Birds such as herring gulls, oystercatchers, and lapwings make similar sounds by waddling or stomping; perhaps our blackbirds also try this, occasionally tapping the ground with their beaks - apparently without purpose [the imitation of raindrop sounds was rejected by the aforementioned researcher as an untenable hunting tactic]. Catania used the endemic Mississippi earthworm (*Diplocardia mississippiensis*) and the eastern American mole (*Scalopus aquaticus*) for his experimental setup.



We may be curious to see how things develop in Obernberg am Inn - in any case, while worm grunting [see movies on Youtube.com] would decimate the worm fauna, it would destroy the soccer turf in other ways.

Further reading:

Catania K. C. 2008: Worm Grunting, Fiddling, and Charming-Humans Unknowingly Mimic a Predator to Harvest Bait. PLOS ONE. 3 (10): e3472.

<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0003472>

Hohla M. 2021: The black-headed earthworm (*Aporrectodea nocturna*) in Upper Austria the "black sheep" among earthworms. ÖKO-L 43/1 26-35. [http://www.flora-deutschlands.de/Publikationen/Hohla\\_OEKO\\_L\\_1\\_2021\\_2.pdf](http://www.flora-deutschlands.de/Publikationen/Hohla_OEKO_L_1_2021_2.pdf)