

Callisthenes (Callisphaena) reticulatus (FABRICIUS, 1787) In Europe

Poster to the 10-th Symposium of Polish Carabidologists in Święta Katarzyna, Poland: 14-16 June

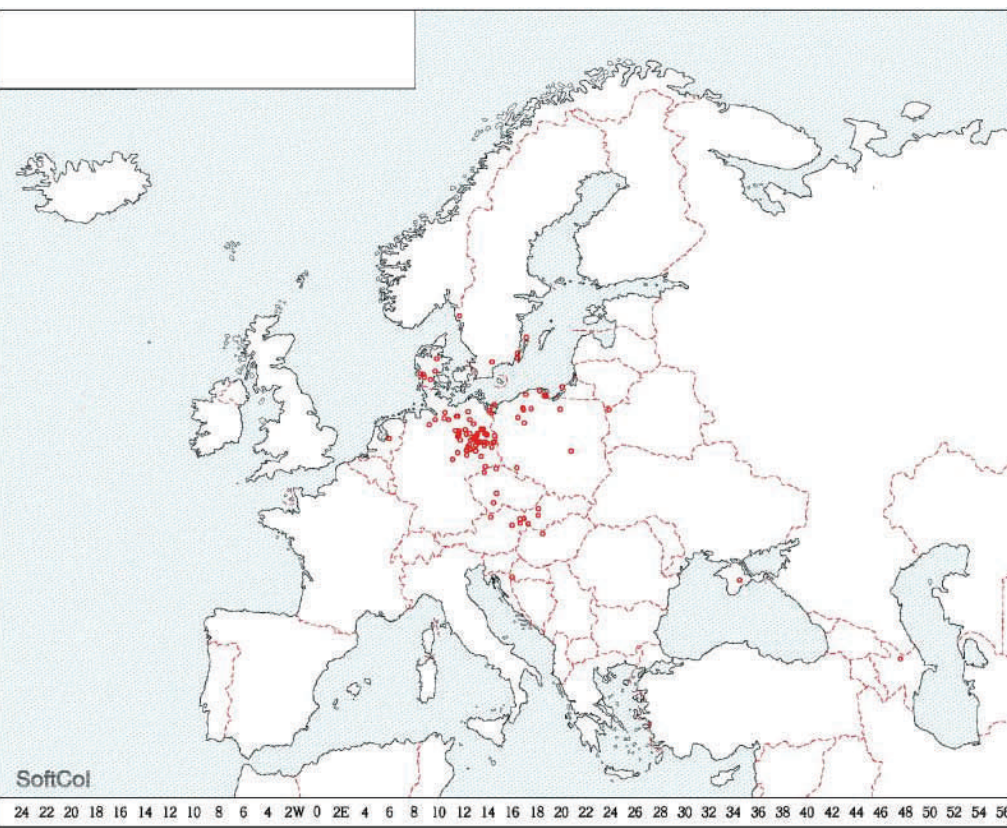
The actual situation and the present knowledge – questions and hypotheses

Callisthenes reticulatus is obviously a steppe species. The populations in Central and Eastern Europe are strongly restricted to the culture steps like Calluna heath lands.

Appearance: April – June (mainly).



Distribution map of *Callisthenes reticulatus* (after OBYDOV & PUTZ 1996)
1 = subspecies *reticulatus* FABRICIUS, 1787, 2 = subspecies *earinus* OBYDOV & PUTZ, 1996



Known distribution of the nominate form of *Callisthenes reticulatus* in Europe



Reicherskreuzer Heide - (both pictures) Typical habitat on a formerly military training area in Brandenburg (East Germany) - with recent records of *Callisthenes reticulatus* (FABRICIUS)



Live picture of *C. reticulatus* (FABRICIUS)

© photo by E. Wachmann

The species is really rare and endangered.

Last populations in Europe perhaps exclusively in East Germany and southern Sweden.

Questions

- Why is there a concentration of records in Central Europe?
- Is the reason the existence of unexplored areas in Eastern Europe because of few entomologists working on this group of beetles?
- Are there not enough adequate habitats?
- Is there a real disjunctive area?

Important facts to the knowledge and hypotheses

- Large *Calluna vulgaris* covered heath lands with long-lasting habitat tradition.
- Much records from beginning of the last century – mainly ending in the fifties.
- Recent records only in military training areas in Brandenburg and Sachsen-Anhalt. Does the design of the investigation play an important role, or is the species subject to extreme natural fluctuations?

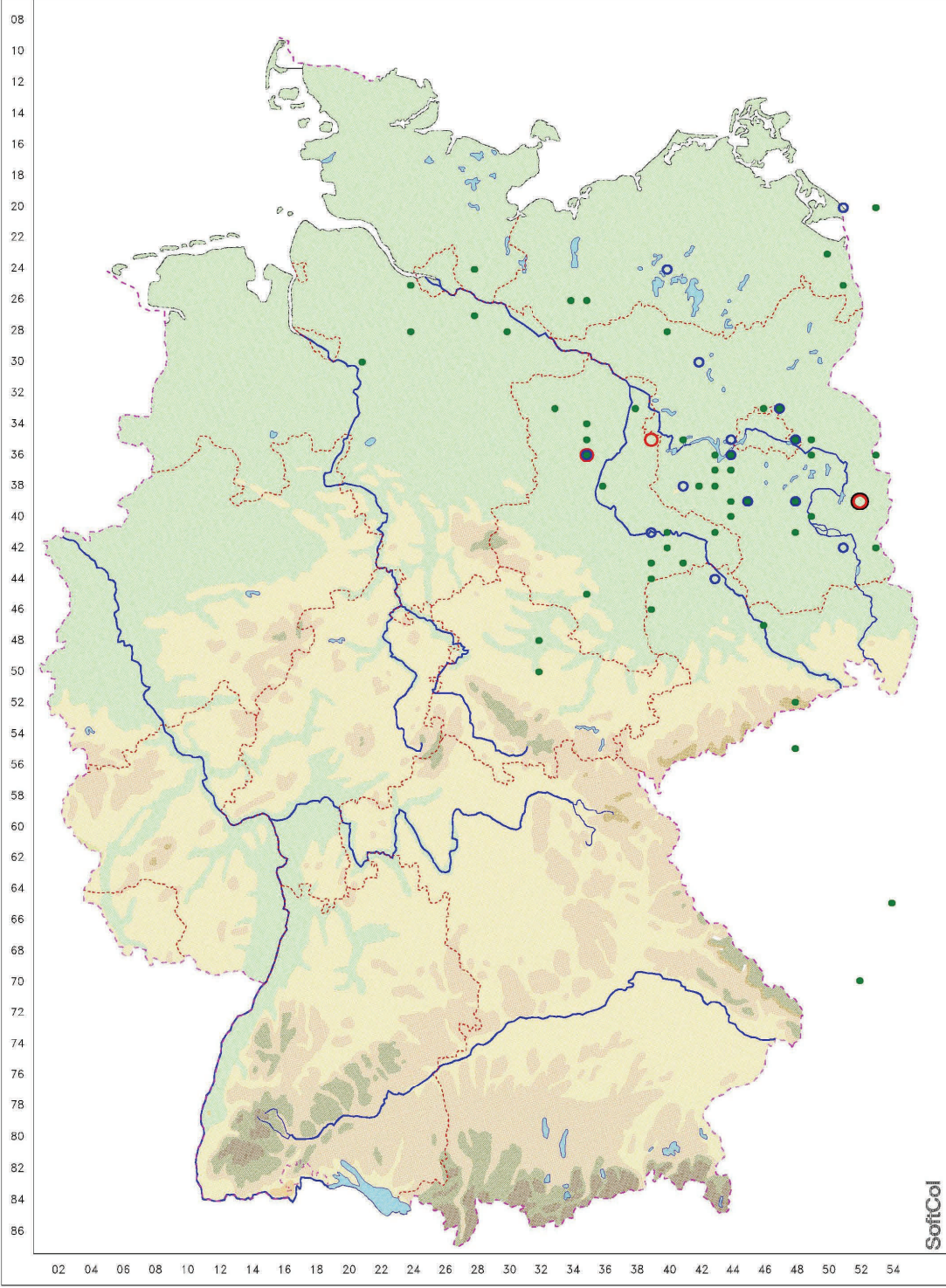
Background:

Two German entomologists studied the same area with records of *Callisthenes* by using pitfall traps at the same time but in several years with contrary results: In pitfall traps baited with vinegar the species could be detected, but in those with formaldehyde as a killing and storing solution no records could be done.

Database

n = 211 records altogether from Europe

<i>Callisthenes reticulatus</i> (Fabricius, 1787)	vor 1946	bis 1985
Aktuelle Situation in Deutschland	bis 1999	ab 2000
	ohne Datum:	+



Time map of *Callisthenes reticulatus*: Situation in Germany.

Literature:
HORION, A. (1941): Faunistik der deutschen Käfer, Band 1, Adephaga - Caraboidea. - Krefeld, 1 - 463.
LINDROTH, C. H. (1945): Die Fennoskandischen Carabiden I, Spezieller Teil. - Elanders (Göteborg), 709 pp.
OBYDOV, D., & A. PUTZ (1996): A new subspecies of *Callisthenes (Callisphaena) reticulatus* (FABRICIUS, 1787) from the Kazakhstan and Orenburg region (Coleoptera, Carabidae). - Lambillionea 96 (3): 521-524.
PUTZ, A. (1995): Zum gegenwärtigen Vorkommen von *Callisthenes (Callisphaena) reticulatus* (FABRICIUS, 1787) in Deutschland (Col., Carabidae). - Entomologische Nachrichten und Berichte 39 (3): 151-152.

