

Radio-tracking the critically endangered *Cerambyx cerdo* (Greater Capricorn), a flagship longicorn beetle

Mats Niklasson, Jimmy Helgesson, Emma Nygren

Nordens Ark

Markus Franzén,

Linné University

Jonas Hedin

County Board Administration Kalmar



MSc/BSc/internship project

Conservation efforts for the critically endangered Greater Capricorn (*Cerambyx cerdo*) have a long history in SE Sweden. This charismatic species is on the verge of extinction having only one extant locality in Sweden/Scandinavia, in Halltorps hage on Öland (Hedin, 2009). Conservation efforts for this species has a long tradition and in 2012 captive breeding and reintroduction started as a joint project between the County board administration in Kalmar län and Nordens Ark. In 2018 conservation took a giant leap forward with the reintroduction of captive bred beetles into two restored areas on the Swedish mainland (Tromtö, Blekinge county and Björnö, Kalmar county).

In this project we are planning to use the latest techniques for radiotracking (Radio Telemetry, "RT") newly released captive bred beetles in one of the reintroduction localities. There are several aims with the study:

- Evaluate the RT technique itself
- Dispersal distances, patterns etc for the released beetles
- Mortality/Life span of the released beetles
- Observations of the beetles' behaviors



example of beetle with antenna attached (courtesy Holohil)

The students/interns should preferably start in early May at Nordens Ark breeding facility to be able to test the RT technique in a lab setting before actual tracking in the field. **We are looking for two dedicated persons for tracking 30-50 days in a row in field. One in the team, preferably both, must have a keen interest in technique and hard ware, without being an expert.** We are working with new technique which has not always been tested in varying conditions.

Field work will start in end of June and continue in July and will be performed on the release site after releasing a large number of *C. cerdo*.

The project will be done in cooperation with:

- Linneuniversitetet (radio tracking technique, insect ecology, etc) Markus Franzén
- Nordens Ark (breeding, reintroduction) Mats Niklasson, Jimmy Helgesson, Emma Nygren
- Kalmar Länsstyrelse (restoration, conservation) Jonas Hedin

Contact:

Jimmy Helgesson, Nordens Ark jimmy.helgesson@nordensark.se

Mats Niklasson, Nordens Ark mats.niklasson@nordensark.se