

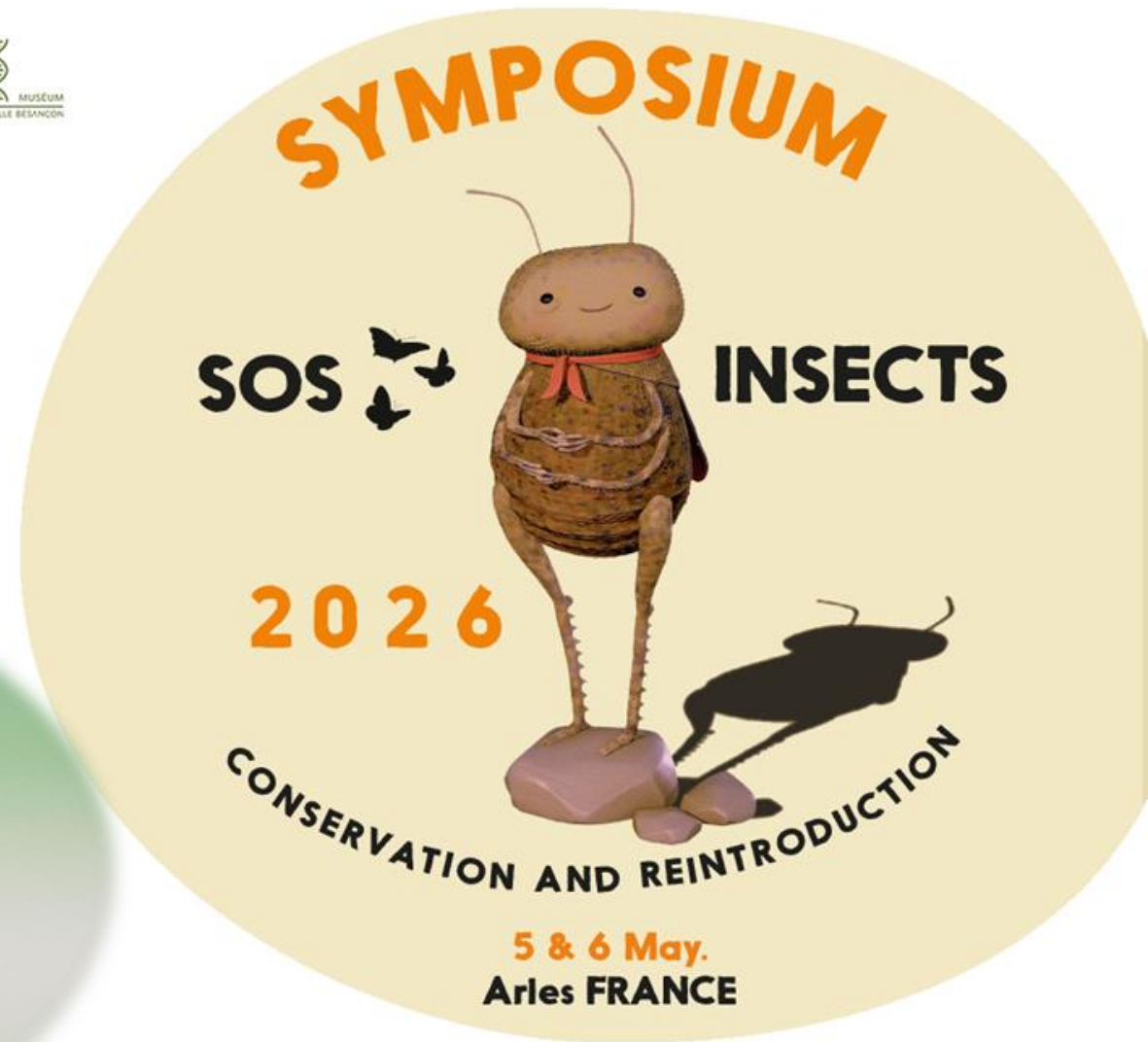


Rattle grasshopper (*Psophus stridulus*)

In-situ meats ex-situ to save
Swedens most endangered
grasshopper

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NORDENS
ARK



Quels défis et comment y faire face ?
De l'exemple du Criquet de Crau aux insectes menacés en
Europe et Méditerranée.

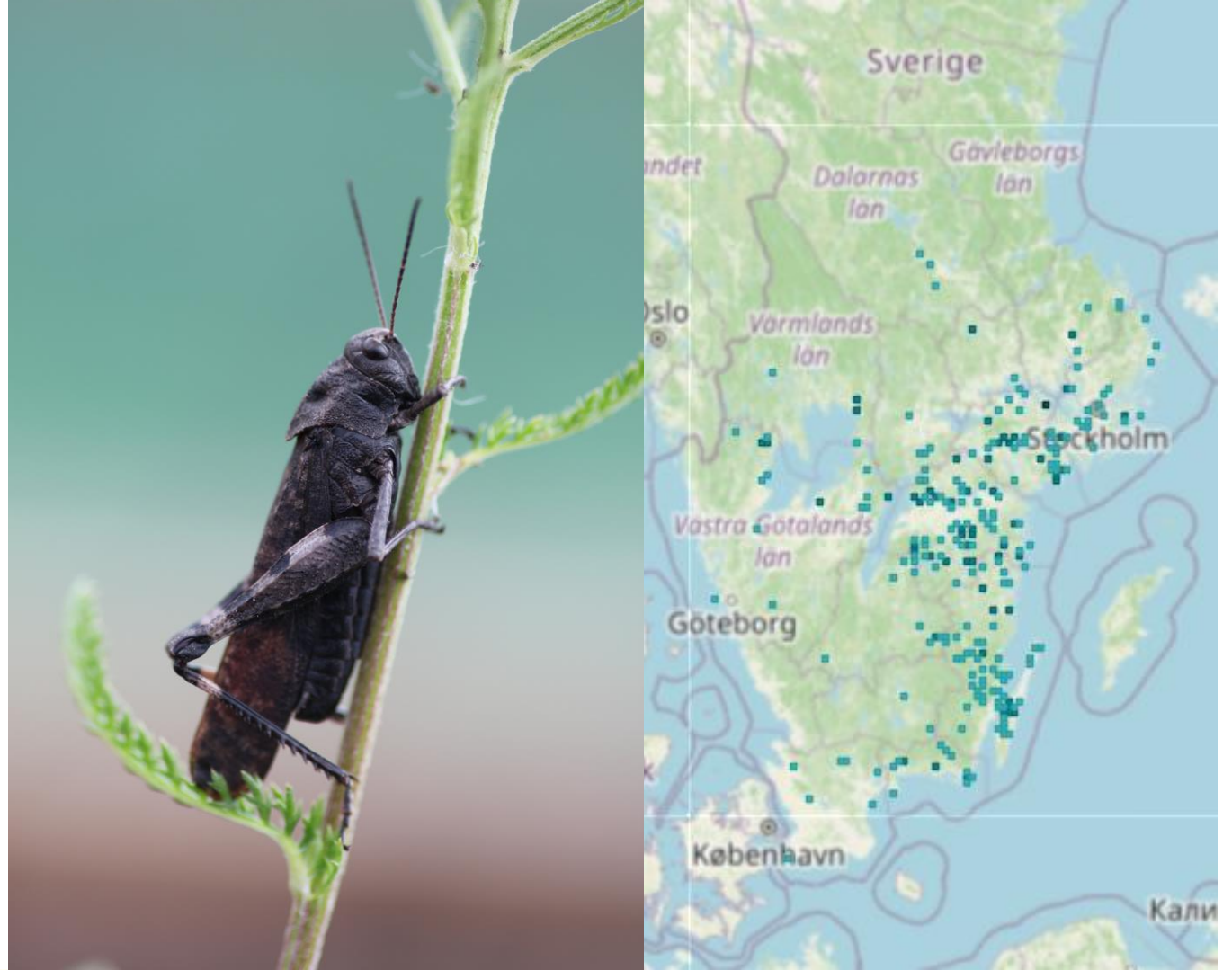
What is a rattle grasshopper?

- Swedens most endangered grasshopper.
- Female (26–40 mm) is larger and heavier then the male (23–25 mm).
- Males have bright red wings and makes a ratteling sound while flying.
- Cant be missidentifed by other grasshopper species in Sweden.
- Natural distribution reaches from the Pyrenees in the West over the stepps and grasslands through Europe and Asia to Mongolia and Korea in the East.



Rattle grasshopper (*Psophus stridulus*) in Sweden

- Listed as endangered (EN) on the Swedish Redlist.
- Action plan for threatened species, rattle grasshopper 2011-2015. Östergötland county.
- During the 1900 the known populations have declined approxemety 70%.
- At present, known from 50 localities.
- Main threats is are lack of grazing that leads to overgrowth, a modernized agricultrial industry. As well as fragmentation of small polulatons.



How do we do this?

Fairly small setup with cages approx. 1 x 1 m, in a sun exposed place.

Cages are covered by a very fine mesh (IKEA curtain), to keep out any potential predator.

The cage stands on a frame that contains a mixture of 30-40% soil and 60-70% sand.

20 breeding pairs per cage.



How do we do this?

Adults are feed natural plants, both planted in the cages but also cut fresh plants, daily or even several times a day.

- Dendilion (*Taraxacum sp.*)
- Yarrow (*Achillea millefolium*)
- Sowthisel (*Sonchus oleraceus*)

Eggs/oothecae (or "egg pods") are deposited in the sand, roughly 3-5 cm deep. The holes colaps them selves.

Eggs have a two year development.

Adults live for a long time and die of age in late august – early september. Or when frost starts to appear at night time.



Two years later...

Before the nymphs hatch, the ground in the cages are torched with a blow torch to ensure that no predatory invertebrate are in the cage.

Nymphs are carried for the same way as adults.

Nymphs are protected from heavy rain by covering the cages with plastic lids.





They eat and grow!

Roughly 3 months later, in the end of august they reach maturity and are ready to be released.

Eatch cage produces 200-800 grasshoppers.



Releases, restorations, research, and results!

Releases

Releases have been made three years.

A total of xxx adults have been released in tree different localities.

This year was the first year that we could potentially find offspring from former releases- and we did!

Restaoration of habitats

Habitat restaurations conducted and planned by the county administartive board of Östergötland. In close cooperation with the municipality of Nyköping.

- Grazing, cutting overgrowth of vegetation.



Releases, restaurations, research, and results!

Research

Genetic study of the Swedish population by Uppsala University.

- Relatedness
- Genetic diversity

Developing alternative rearing methods using desert locust (*Schistocerca gregaria*) and migratory locust (*Locusta migratoria*)

61% & 63% survival rate.

Results!

Ootecha can also hatch after three years.

First offspring found 2025!





Thank you!

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Life **SOS**
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