

Da: Martina Temunovic <martina.temunovic@gmail.com>

Inviato: venerdì 7 settembre 2018 18:17

A: LifeEremita <LifeEremita@Regione.Emilia-Romagna.it>

Cc: Palazzini Cerquetella Monica <Monica.Palazzini@regione.emilia-romagna.it>

Oggetto: Re: LIFE EREMITA Project - Restocking plan of *Graphoderus bilineatus* in Emilia - Romagna (Italy)

Dear Monica,

sorry for my late reply, I was on quite a long holidays

I have just read your letter and the results and I am glad to see that the Croatian individuals have 8 different haplotypes :) meaning quite high genetic diversity in comparison to other countries tested. Can you by any chance provide me with the haplotype network or at least let me know what are the phylogenetic relations between the haplotypes and which population is most close to ours?

Regarding capturing live specimens for restocking, 50 specimens is quite a high number since this is strictly protected species in Croatia. I will need to contact my colleagues from the DIRECTORATE FOR NATURE PROTECTION considering permits and procedure for collecting and transport and can get back to you.

I can give you information that we have captured a total of 105 specimens in 3 years with a total of 814 trapping nights so I would say 50 specimens is not very likely to be captured alive... but of course it depends on the year as in dry years we had much less than in wet and flooding years. Our main problem was to catch them alive as most of them died in the traps, so I hope you have developed some kind of special method for collection? I would be very interested to participate in your further activities including the study visit if possible and to adapt our methods for monitoring purposes according to your experience. Most of all as we initially agreed me and my colleague Natasa Turic since we both work at the Faculty are looking forward to be involved in any scientific activities and publications where we can contribute most with our expertise and experience on this species. We have in preparation a paper on habitat and ecological requirements of *G. bilineatus* in Croatia but I can prepare and send you required information on ecology, habitats, vegetation, chemistry... from several sites. Since most of these data is not yet published I would be very grateful if you use the data only for project purposes of restocking.

The only important thing is your deadlines and dates.

I am completely out of office next two weeks for two conferences.

The most convenient period for me to travel is during winter semester (October- February) as then we don't have lectures and exams.

The peak of *G. bilineatus* activity is from Mid April - July so for this year I think is too late for sampling activities...

So much for now, let me know your next steps and dates.

All best,

Martina Temunovic, PhD

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https://www.researchgate.net/profile/Martina_Temunovic/

<https://scholar.google.com/citations?user=ja5qi00AAAAJ&hl=hr&oi=ao>

Oggetto: Re: LIFE EREMITA Project - Restocking plan of *Graphoderus bilineatus* in Emilia - Romagna (Italy)

Data: Wed, 7 Nov 2018 13:15:28 +0100

Mittente: Martina Temunovic <martina.temunovic@gmail.com>

A: LifeEremita@regione.emilia-romagna.it

CC: Cristina Barbieri <cristinabarbieri@istitutodelta.it>, Palazzini Monica
<Monica.Palazzini@regione.emilia-romagna.it>, leonardo.congiu@unipd.it

Dear Ornella,

Sorry for taking me long time for reply :(

I am sending you in attach the table filled with information we have for the four sites where we have *Graphoderus bilineatus* in Croatia. These are not the only sites with species presence but 3 of them are those where we have collected specimens for your DNA analysis and in general are sites with good quality habitat and relatively abundant populations. There is another potential site (last one in the table called Josipovac) but I need to discuss with my colleague about it.

We actually never took altitude info as all these sites are all very low in lowland/floodplain forest but I can look at my GPS data and send you these info later. Regarding riparian flora, do you mean surrounding forest type or? I have sent you a list of all the aquatic/riparian plants recorded at each site but let me know if you need a large scale habitat type? I can extract those from our habitat map...but in general these sites are within large wetlands and floodplain forests of *Quercus robur*, *Fraxinus angustifolia*, *Salix* and *Populus* species...

Let me know if this info is ok for you.

All best,
Martina

Oggetto: SV: LIFE EREMITA Project - Restocking plan of *Graphoderus bilineatus* in Emilia - Romagna (Italy)

Data: Tue, 11 Sep 2018 08:41:38 +0000

Mittente: Karlsson Tommy <Tommy.Karlsson@lansstyrelsen.se>

A: paolo.audisio@uniroma1.it <paolo.audisio@uniroma1.it>

CC: Palazzini Cerquetella Monica <Monica.Palazzini@regione.emilia-romagna.it>, crirstina Barbieri <cristinabarbieri@istitutodelta.it>, Chiavegato Elena
<Elena.Chiavegato@regione.emilia-romagna.it>, Nilsson Kristian
<Kristian.Nilsson@lansstyrelsen.se>, LifeEremita <LifeEremita@Regione.Emilia-Romagna.it>

Dear Dr. Paolo Audisio,

I have sought out about 50 possible sites in Sweden for collecting *Graphoderus bilineatus* to your restocking project. I have selected sites that have a fairly recent observation of the species (from year 2000 and onwards) and sites that seems to have a fairly good population of the species (at least 3 individuals have been caught/observed at a certain date) from the Swedish Species Reporting System (www.artportalen.se). Unfortunately, we don't have so much knowledge about the sites to do the ecological description you wish. I have done a quite simple ecological description of each site by descriptions from the observers and by my own assessment when studying the sites at maps in my GIS. If certain sites are of special interest for you, it may be possible for me to find more information about them. I attach an excel-list of the sites and an overview map of the sites, with the name of the Swedish counties stated.

I will return with information about authorization/permission.

Best wishes,

Tommy Karlsson,

Coordinator of Biogeographical monitoring of dragonflies and diving beetles listed in the Habitat directive in Sweden

County Administrative Board of Östergötland

Oggetto:SV: LIFE EREMITA Project - Restocking plan of *Graphoderus bilineatus* in Emilia - Romagna (Italy)

Data:Fri, 14 Sep 2018 13:06:36 +0000

Mittente:Karlsson Tommy <Tommy.Karlsson@lansstyrelsen.se>

A:LifeEremita <LifeEremita@Regione.Emilia-Romagna.it>

CC:Palazzini Cerquetella Monica <Monica.Palazzini@regione.emilia-romagna.it>, crirstina Barbieri <cristinabarbieri@istitutodelta.it>, Chiavegato Elena <Elena.Chiavegato@regione.emilia-romagna.it>, Nilsson Kristian <Kristian.Nilsson@lansstyrelsen.se>, Paolo Audisio <paolo.audisio@uniroma1.it>, ornella.decurtis@regione.emilia-romagna.it <ornella.decurtis@regione.emilia-romagna.it>

Dear Dr. De Curtis,

Regarding permission to collect individuals of *Graphoderus bilineatus* in Sweden, you will have to apply for this to each County Administrative Boards that is concerned according to the Swedish laws about protected species. You can see the counties on the map that I attached in my former mail. You need to write an application that contains the following information:

- No. of individuals that will be collected.
- Names of the person that will do the collection.
- If the landowner has approved the collection.
- If the collection will take part in a protected area (Nature reserve and/or Natura 2000).
- Description of the collection – method and aim.
- When the collection will take place.
- How the population(s) will be affected by the collection, both on local and national level.
- What measures will take place to prevent negative effects on the population?
- Is there other alternatives to reach the aim of the projects, e.g. other places to collect individuals from?
- Will the collected individuals be shown public?
- Will the collected individuals be captured and transported? - They will of course do so in your project, and you will therefore also need permission for that from the Swedish Board of Agriculture. I think you roughly use the writing for both permission to collect and permission to hold in capture and transport.
- Maps that show the concerned area/sites – both overview and detail maps.

In protected areas you are sometimes not allowed to collect animals and plants. It depends on how the regulations for the protected area is formulated. If it not is allowed, you will also have to apply for permission for that. Such a application needs to contain the following information:

- Name of the landowner and if the landowner has approved the Collection.
- Description of the collection – method and aim, and how it will affect the population.
- What specific reasons you have for the collection.
- When the collection will take place.
- Maps that show the concerned area/sites – both overview and detail maps.

To apply for permission from the regulations in a protected area, you will have to pay a charge of 2300 SEK.

Best wishes,
Tommy Karlsson, County Administrative Board of Östergötland

From: martins.kalnins <martins.kalnins@biology.lv>
To: LifeEremita <LifeEremita@Regione.Emilia-Romagna.it>
Sent: 9/8/2018 9:25 PM
Subject: Re: R: LIFE EREMITA Project - Restocking plan of *Graphoderus bilineatus* in Emilia - Romagna (Italy)
Dear Monica!

I am sorry for late answer, but I am just few days back from holidays. But now, go to your questions:

- The population of the *Graphoderus bilineatus* in Latvia is rich and if you wish to take out several dozens or 2-3 hundreds specimens - it is not a risk for Latvian population. In my opinion more important question is how to catch so many (live!) specimens in quite short period?! But ok, I think it is possible, but not easy.
- Ecological description - I will prepare it, but not today. I hope that I will do it during next week. But about altitude I can say now - the highest point in Latvia is 311 m a.s.l. - e.g. most of localities are up to 150 m a.s.l.
- Collecting permit I can get relative easy, e.g. if I am responsible person for your collecting activities. In our legislation there are not special rules for invertebrate transporting permits (except CITES species) - now we all live in one big country - Europe! :) But, of course, I will check it again and ask consultation to Food and Veterinary Service.

I am interested in collaboration - I can show to your team *Graphoderus bilineatus* localities, get collecting permit, give ecological description of selected localities and some other advises. My interest in this collaboration - I wish to be as co-author in publication and it will be nice to see Italian sites not only for *Graphoderus*, but also for other species (I am odonatologist, and partially I am working with *osmoderma* in Latvia too).

Just for your information - I am quite busy and involved in numerous activities. Therefore I am not always able to answer on e-mails in the same or next day. If one or another question is urgent, don't hesitate and write optional deadline for answer or send me reminder!

Regards,
Martins