

# **Stag Beetle News**

There are currently **268 stag beetle lovers** taking part in the Network and we want to keep you all updated with this second edition of our Newsletter!

We will talk about the latest news, your 2018 transect walk results and getting to know each other better by sharing volunteering experiences within the range of the European stag beetle.

### Transect walk results

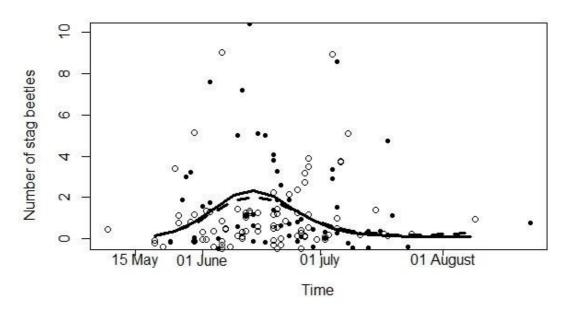


All together **61 transects have been registered in 2018**, **27 more transects** than in 2017! Most transects lie in the UK followed by Spain, Belgium and Portugal.

From those 61 transects, we received data from 26 transect walks in 2018 compared to 20 transect walks in the year 2017. From these, 15 belong to the UK, 4 from Belgium, Spain and Netherlands have 2 each; and Portugal, Switzerland and Serbia 1 each. This is great news as **the number of transect walks is increasing!** 

# Since we started the website in 2016 more than 10 of you have walked your transect every year. We want to thank you and encourage you to keep doing so as this provides us with significant conservation results!

We also want to say a **special thanks** to those volunteers who have **walked their transects at least six times this year** as this kind of data is essential for a good evaluation of the local population size and trend! Thank you Joanne and Martin from the UK, Ángel and Jonatan from Spain, Harry and Jan from the Netherlands, Slyvie from Switzerland, and Michele, Erick and Ingrid from Belgium.



In some regions in Europe, the **2018 summer** goes into history as **extremely** warm and dry. As a consequence, some people observed that the stag beetle season was earlier and shorter. We tried to pick up this signal in our transect walk data.

In the plot above, you can see the **results for Northwest Europe** (Belgium, Germany, the Netherlands and UK) where 2017 observations are represented with black circles, and 2018 observations are represented with white circles. The number of stag beetles seen is given a bit of additional noise to avoid overlapping dots and rare observations above 10 animals per transect are not shown. Two trend lines are plotted on top, the full line representing the 2017 seasonal pattern and the dashed line representing 2018. These trend lines take differences between transects into account and are adjusted for differences in temperature.

These lines show that the **peak of the season was half of June in both years** and also the length of the season doesn't differ. This mainly means that our data is unfortunately not big enough to pick up this pattern and that more transects and transect walks are needed to picture these kind of yearly differences.

### Volunteering experiences

This season we interviewed two volunteers and they both have very interesting stories to tell!



Antonio de la Torre



Harry Derksen

Antonio de la Torre lives in Spain and is a member since July 2017. Harry Derksen lives in the Netherlands and he's a member since November 2016. Here is what we asked them:

# **ESBMN**: Tell me a bit about you and how you got interested in stag beetles.

Antonio: I have always liked nature since I was a child, and I am still interested in learning more about animals, plants and ecosystems. Iwas born in Spain and I think I'm lucky because so much nature is stillpreserved around me. Later on, I learnt that the most common animalsin the world are insects; I learnt many facts about them and I was surprised that they could be as fascinating as big mammals. We know most insects are small but there are also some very big ones like the stag beetle!

**Harry**: About 15 years ago somebody took me on a trip to watchstag beetles. I only knew this species from pictures and I didn't know it was living so close-by in a neighbouring nature reserve. Due to the presence of this species, this nature reserve was even protected as a European Natura 2000 site. Since then, I went back every year in search of this magnificent beetle.

Antonio: I discovered the network two years ago in a short notice calling for volunteers published in a magazine related to nature and environmental issues named Quercus. I read it at the end of June, a bit late, and I contacted the network coordinator in Spain and hetoId me it was better to do it properlynext time and that they would be glad to contact me again for the nextseason. They did! and here we are, it's nice to be part of the network.

**Harry:** In 2014 I was asked to join ina study on the dispersal of this species in the Netherlands. We captured, marked and released all the beetles we found each evening. Twenty of them were even given a tiny radio-transmitter to follow up ontheir movement during their short adult live. I loved to do this! At the end of 2016, I heard about the

European Stag Beetle Monitoring Network website and immediately decided to join in.

#### ESBMN: Could you tell us whatyou like about walking the transects?

Antonio: Transects are beautiful because they happen in the heart of the forest. For my transect, I walk narrow paths between many trees, I spend most of the time looking up tosee the beetles appear against the treetops. The most special moment for me is on the way back when I finish the transect. It's normally dark, and inside the forest it's even darker. At the beginning the path shines enough to follow it but later I need touse my headlight, the forest completely surrounds you...

**Harry:** My transect is one kilometer from my home so I can walk this transect quite often. In the last years, more and more people come to this place to see this rare beetle which leads to many pleasant and educational encounters.

# **ESBMN:** Is there anything you have discovered about stag beetles since you've become a volunteer that you didn't know ofbefore?

Antonio: Yes, there is! I've learnt that stag beetles only feed on dead trees. It's nice to understand that when an oak tree dies it can still be support for so much life, a new life starts on it. I have also learnt some local names, for example in Galicia and in Portugal the stag beetle is called "vacaloura", which isnot named after the antlers of a stagbut a "vaca" cow, and "loura" which means a color like a chestnut.

**Antonio**: I have found the rhinoceros beetle (*Oryctes nasicornis*) whichalso has a spectacular horn; the great capricorn beetle (*Cerambyxcerdo*); and ground beetles (Carabidae), I like them because they are hunters, and at their own scale, fearsome predators.

**Harry**: Besides many ground beetles, I also find the lesser stag beetle (*Dorcus parallelipipedus*) in this location. And when stag beetle season is nearly over, another large beetle starts to appear, the sawyer beetle (*Prionus coriarius*), it's equally impressive and much better flyer!

# **ESBMN:** Have there been any memorable walks or any incidentsduring your walks?

**Antonio**: Yes, one evening the weather conditions were very warm and humid and I saw some beetles fly over me while I was driving up theroad towards the transect. When I started walking, the first beetles appeared quite soon but as the transect developed it was no better than any other day so I started feeling a bit disappointed. Then I noticed there was a difference in their behavior, they were doing largerflights than usual, it seemed they had decided to fight that night. It wasgetting darker and I was approachingthe end of the transect when I noticed one beetle flying to a small oak near the border of the transect. When I approached the oak tree, I discovered there was a large concentration of males fighting one another! New beetles kept arriving and perching themselves on the trunk and branches of the tree. The oak was small, just double my heightand I could see the whole tree easily; the beetles didn't pay much attentionto me so I took some pictures trying not to interfere with them too much. Iwasn't able to count them all properly but I saw more than a dozen of them!

**Harry**: I especially remember my transect walk on the 20th of June 2018. There were lots of visitors butalso loads of stag beetles, I counted 40 in jut 2 full hours. When the darkness fell, a number of bats started to actively hunt the stag beetles. After this spectacle, my evening ended with the dance of a dozen of fireflies. A evening hard to forget!

#### ESBMN: Do you have any tips fornew volunteers?

Antonio: For new volunteers I wouldsay how important it is to know how to recognize mature forests. Stag beetles are a good indicator of foresthealth. My advice is to try to find a good place where you've seen them before, if not, speak with people in the villages, I find this has been specially helpful. Another tip is that the transect should go inside the forest but it's also good to have some open parts, clearings with grass give way to more diversity and stag beetles are able enough to fly through them, it's also easier for youto see them in an open place.

**Harry**: As hint to fellow volunteers I would say to not pick up the beetles by hand, for example to remove them from the road. It is better to use a branch, especially because others, often children, start copying you and doing this with less caution sometimes results in the loss of one or more legs for the stag beetle, notthe children!

#### **News!**

## Stag beetle data on the move

Since the start in 2016, we have managed our own data with basic website forms. This however didn't allow any admin options so we couldn't give a lot of feed back! When you entered strange data, we didn't have a lot of options to contact you and ask you to check again.

Now, INBO agreed to step in and a **build a database** (<u>observation.org</u>). Here you can register your observations of any plant, animal or fungi. We will build the same forms as we already have (but with many more support options) and allow admins in each country to follow up your progress on a daily basis. We will also move your existing data to this new environment so you can still update or download it.

#### More about this in an extra mail before next season!



## European stag beetle night

We are organizing a citizen science night! Save the date this summer which will focus on the **evening of the 21st and 22nd of June**, the main peak period of the European stag beetle in most regions.

Our Portuguese colleague, João Gonçalo Soutinho, had the brilliant idea to organize a yearly stag beetle evening to talk about and show our beloved beetle to the broad public. Our aim is to increase local awareness of their endangered situation and conservation needs, especially in areas where theylive in private gardens.

Many people all over Europe have already been giving these kind of guided tours but by putting them under a European wide label we hope to foster more visibility which can only help the stag beetle. If you are already giving a guided walk or want to organize something like this in your region, please let us know and we can put them under this European umbrella, it doesn't necessarily have to be on this exact date . We will keep you posted with more details about this event!



# Set up your own transect

Many of you are already walking a transect but some have not yet registered a transect or haven't started it up. You may not know how simple it is to set up a transect and how little time it requires to walk it, you can even do it in your own street! Your continued effort will be of great importance for the conservation of this species.

Find out how to do it on our website

## Something extra to read

Want to read more about stag beetles? You can take a look at our new <u>literature database</u> and learn about the latest scientific articles.



We have already included more than 200 of them from different countries and in different languages. If you are not able to find the full text on the internet we might be able to help you. Certainly, some articles are still missing so please feel free to send us a list with articles not yet included or any spelling mistakes you might come across.



# Thinking about your next summer holiday?

Do you usually choose the same location to go on holiday? If your destination has a local stag beetle population, why not set up a transect along your favorite camping site?

We are always happy to receive data on stag beetle sightings, even if the transects aren't walked weekly they can prove very useful for conservation, especially in countries where little volunteers are found.



### **Internship at INBO**

Would you like to work with us?

We are looking for an early career scientist to come and work with us at the **Institute of Nature and Forest** in **Brussels**. The internship will last 4 months starting in **April 2019**.

For more information on the project and how to apply:

Download PDF

## **Questions for the Network**

Have you ever wondered how the European Stag Beetle Monitoring Network works?

Antonio de la Torre had some questions for us and we wanted to share our answers with everyone. This is what he asked us:

# Antonio: I would like to say that I didn't expect someone to create such a broad European network. I would like to ask you, how difficult was it to make it possible?

To be honest, it was fairly easily to set it up the European monitoring network because all the researchers that are working on this species have been working in close cooperation for many years so it felt logic to do so. However, it is much harder to find comfortable long term funding for it. The internship grants so far have been a major support to set up what we have.

# Antonio: Do you think knowing about stag beetle lives can make people more aware about forest protection?

Of course! We fully agree that educating people about the European stag beetle will help to raise awareness on forest and landscape conservation. The european stag beetle is what we call an umbrella species, this means that the conservation of this species indirectly affects the protection of other species and habitats that share the same ecosystem. Our aim is not only to protect the european stag beetle, but also all the nature that surrounds it. Regarding education, many people give annual guided walks to the broad

public to let them see and learn about this remarkable species and there are also lots of environmental awareness programs teaching the public for example, how to build a log pile in local parks, schools or private gardens.

### **Beetles calling!**

We are always looking for new volunteers to help out so feel free to spread the world of stag beetles to friends and family, **everyone is welcome to join** to start up a new transect or prolong an existing one!



Do you have any questions for us, any ideas for our Newsletter next year or would you like to share your story? Let us know.

Have you published a scientific study on stag beetles? We would love to share a short overview of it here.

