Profile of a new BMS co-ordinator: Simona Bonelli

An interview with one of the new BMS coordinators in Europe, **Simona Bonelli** from Italy. Simona Bonelli is a biologist with a PhD in agricultural entomology in the Agronomy Faculty and nowadays she is a Professor at the Department of Life Sciences and Systems Biology at Turin University. She tells us what she did preparing and organising the Italian BMS and hopes that the positive results could motivate other countries to join and start a BMS.

The Italian BMS started in 2018 and since then it hasn't stopped growing. Italy is one of the priority countries in the ABLE project and, in this interview, we asked to the main coordinator several questions about the creation of a BMS, what was necessary to create it and what was her experience.



How did you start to work with butterflies?

I started 20 years ago when I met **Emilio Balletto**. He is a big expert on Italian butterflies. He was involved in European level initiatives and when Butterfly Conservation Europe (BCE) was created, he was the contact of Italy for many years. Thanks to him I was introduced to BCE and the other butterfly experts of Europe.

After finishing my Postdoc, I came back to the Science Faculty and applied to an open permanent position with Emilio Balletto, focused on butterfly conservation. I was already interested in conservation biology, therefore this position was a good opportunity for me. I have been working with Emilio Balletto for many years. Now, he is enjoying his pension and I am the Professor, the same role as he had before.

How did butterfly monitoring start in Italy?

In Italy, butterfly data has been collected nationally for many years, creating a big dataset of **presence/absence data**. This data was used for the European Mediterranean Red List, Italian Butterfly Atlas (2007 CKMAP), and finally the Italian Butterfly Red List (2018). However, this was only qualitative data with a distribution map of all the species. Nowadays we continue to gather more data, year by year.

About the creation of the Italian BMS, what was the motivation point to start?

The Butterfly Monitoring Scheme started quite recently, in fact just last year. **BCE** was the main motivator at previous meetings with other coordinators. I was urged to start a monitoring scheme in Italy. Emilio, other Italian people and I were not positive about that, because there were many problems and I was not convinced it would work in Italy. But in every meeting, we saw how every year new countries started their BMS. We received many, many suggestions but I was suspicious to start and that a BMS could be applied to Italy.

When we read about the Butterfly Grassland Indicator, we were excited about the idea of a European level result, showing the changes in butterfly populations. But when a comparison of the North and the South of Europe was done, I was impressed that the Mediterranean region was represented only by Catalonia. I was strongly motivated to encourage Mediterranean countries to start a BMS, an important tool to understand changes. The motivation was clear.



How did you decide to start the Italian BMS?

The key that changed my point of view was **the Spanish example**, it was the detonator! I was impressed by the Spanish BMS and how Miguel Munguira started his initiative involving protected areas and rangers. He was so positive with the first results of the project. We were inspired to follow this example. Miguel and I had long discussions thanks to BCE meetings in Laufen and how starting with protected areas could work. Miguel said "Simona start! because if you do part of the work with the protected areas, the BMS could work in Italy". It is true that the Italian situation is quite similar to Spain.

Finally, in 2018 we decided to start the Italian BMS and we signed the contract to join the eBMS.

What do you think is important to start a new BMS?

You have to think carefully about **organisation**. Italy is a big country, and very long. There are differences inside the country, from North to South, from West to East, every region is different from many point of views: habitats, climate, and also people. It is important to cover your entire country (not only one part), and you have to keep in mind, at least in Italy, there are strong regional differences. Italy has differences in heterogeneity of habitats, in terms of climatic conditions, elevations... if you don't think how to manage these differences from the beginning, you will probably fail.

Another important key to overcoming problems was to find people in other parts of the country who were interested, motivated and believed in the project. There were some people on my list, but one was close to retirement. I focused my attention on **Leonardo Dapporto** and **Stefano Scalercio**. I had worked before with them in many initiatives (EU, Red List) and I thought both were good candidates for being Regional coordinators of the Italian BMS. Fortunately, they agreed.



Stefano (in red) talking in the Sila workshop



Simona and Leonardo discussing in a workshop

Which facilities/difficulties did you find creating the Italian BMS?

The difficulties were mainly in my mind. Since the beginning, the reaction was even more positive than I had ever thought before. When we started, we had a good reaction from people in terms of enthusiasm, motivation to help butterflies, but also, in terms of going into details, what does it mean to have a BMS? To count butterflies?

Probably the timing was good for people to get involve with different levels of biodiversity conservation and to understand the need to monitor. Maybe 10 years ago it was different but now it is the moment to mention it, people read more and are quite used to speak English, to use websites... **the society changed** in Italy. From Sila to Ticino, for example, explaining how to input their data on the website, people were open and happy to see how easy it is and even asking for more things like an app.

People are not only saying they want to do things, they are asking for real actions, "and now, after the workshop, what should I do? What is next?" Society is demanding more about biodiversity, nature conservation, environment... so if you tell them that we are checking butterflies to see if they increase, decrease... People understand the importance of butterfly counts, to see the differences and changes.



What are the benefits of BMS for Italy and for you?

In Italy there is a huge biodiversity, almost 300 species of butterflies, maybe half not being monitored at all. If we engage a network of people in the field, we could **perceive the population changes** that are happening and identify species that are disappearing from other regions of Italy. Species that are rare, endemic or protected are the main focus of attention. But the rest of the butterflies, the so-called common species, no-one is really looking at them. We don't have any idea about what is happening to them. For example, there are a lot of studies about butterflies in local areas, but we don't know whether what is happening in the North is the same as the South. We are missing national studies.

The second point is to **implement the assessment** of protected species. Italy has 16 Habitat Directive species, 60% of the European species. I think in 5 years, before the next assessment, we should be able to use the data from the BMS for the Habitat Directive species.

How do you feel about this year of the Italian BMS?

The first year of the Italian BMS was exciting because we prepared many workshops, throughout Italy, in many different places. We had the opportunity, thanks to the ABLE project, not only to organise the workshops but especially to **have the opportunity** to exchange opinions, ideas, skypes and emails with different people, different points of view. Also to have someone to contact you every week and checking small problems, answer simple questions and ask their opinion. We were not alone; we did everything as a group, deciding actions with the help of people with more experience.



Of course, the **Workshops** made a difference, otherwise I wouldn't have an idea of the reaction of volunteers. Also,

Simona with some volunteers in Elba Workshop

organising these workshops alone would have been too expensive and difficult to do. They involved a lot of effort.

How do you feel about all the results and motivation from the volunteers?

Unbelievable results!! I couldn't think before of achieving something like that in one year. More than 20 transects. A lot of people have written to us after the workshop, asking exactly "what to do now! next spring I want to count butterflies, what can I do?" There have been many positive reactions and so negative reactions at all.

For the moment, I am really enthusiastic. I owe big thanks to ABLE and BCE for their help, because otherwise I wouldn't have started. Also for the message given: we are not doing our BMS alone in the world; **we are a community!** People understand the Butterfly Indicator, even when people are not from our field, they realise how important it should be to add the Italian data to this evaluation. That is clear to everyone, and I think it is very important. They have a very clear idea of wanting to compare our data with others.

Could you give a positive message to the European colleagues that are thinking to create a BMS in their countries?

Just start! It is easy, it is true it requires a lot of time and energy to start, but it is easier than expected! Things go by themselves. And another point, especially to Mediterranean countries, is that our butterflies need it! More of the 70% of European butterflies are in the Mediterranean countries. Please, Mediterranean people, start! Also, the Eastern countries host huge unknown biodiversity, this biodiversity needs us, they have to start counting butterflies. They are not alone and it easier now. It is the right moment to start a BMS. Let's start!



Italian Butterfly Monitoring Scheme Group