Transect Year by Year Index Plots

You may have noticed that historical data has recently been loaded onto TW online. The historical data are the Annual Indices for each species, for every year the transect has been walked at a particular site.

You can view this data via the UKBMS Home page, and clicking onto the tab, **Year Plot**.

After clicking onto Year Plot, the resulting page has seven tabs,

1. site tab; this tab offers you the choice between transect and WCBS, leave it set on **Transect**.
2. Select transect tab; this is a list of transect sites, **click and select your transect** e.g. Magdalen Hill Down - Original.
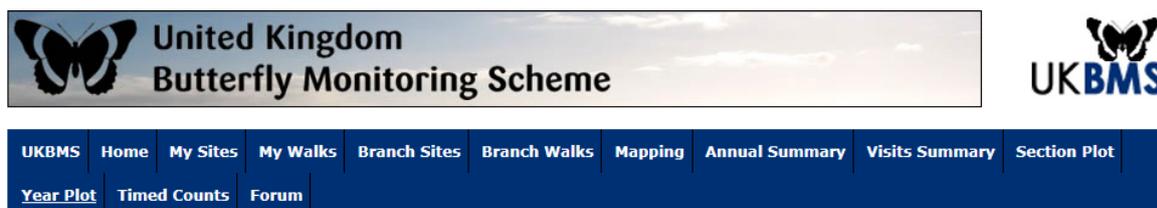
3. **Data tab**; this tab offers you a choice of index or count, leave it set on **index**.
4. **Load data** tab; click to load your transect data
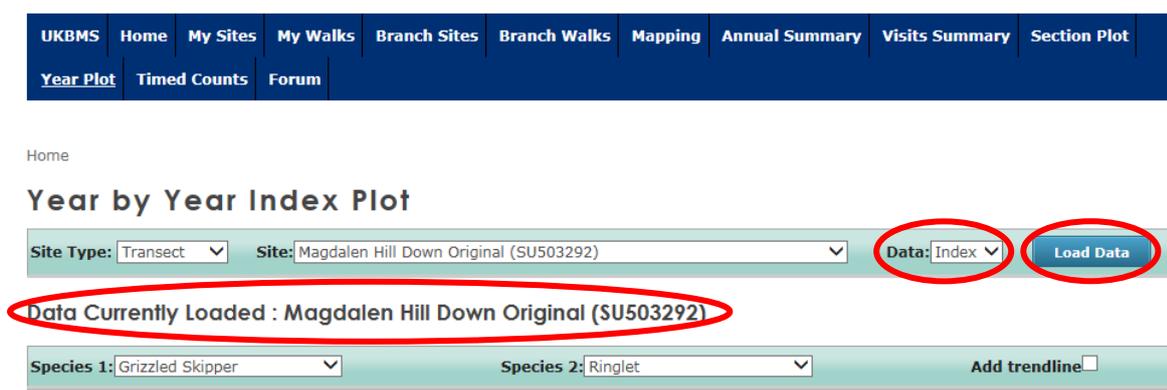
5   **Species 1 tab**; click on the species you are interested in and a graph will appear plotting the annual indices from the year the transect was started to 2015 (2016 data not included as yet.)
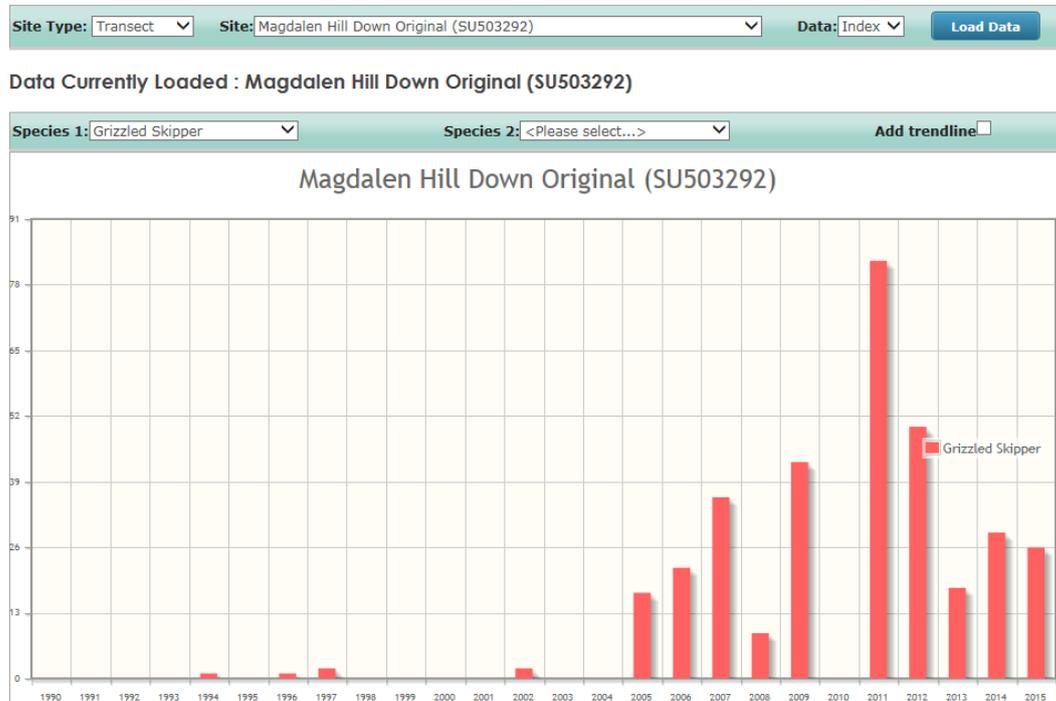
6   **Species 2** tab; this tab allows you to include a second species on the graph.
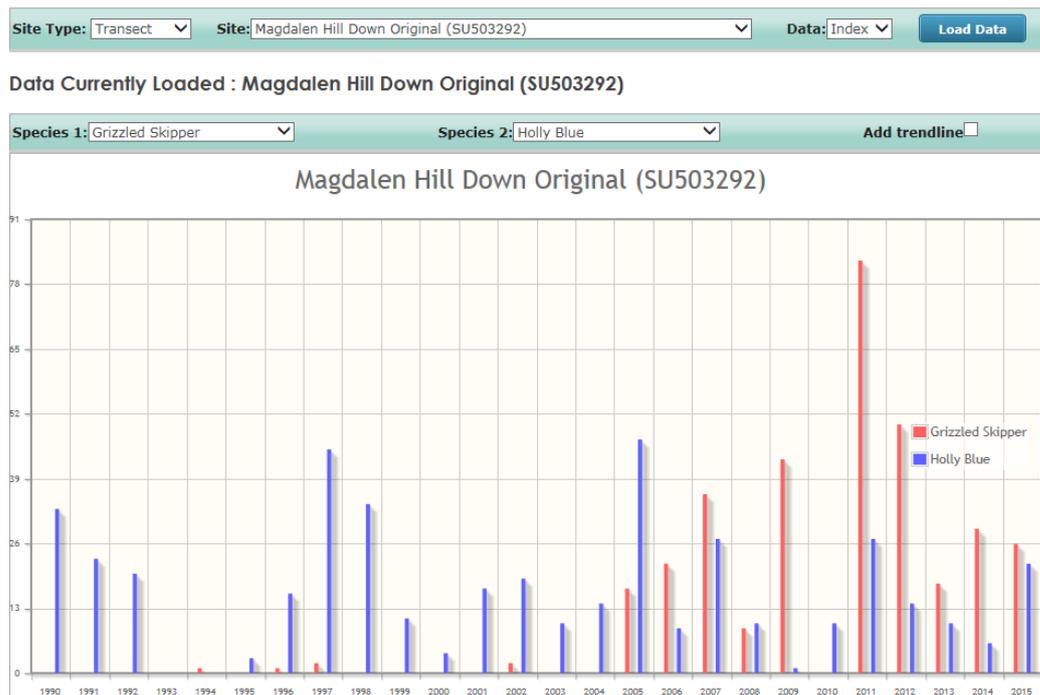
7   **Add trendline tab**; click on this and a line graph will be displayed showing data trends.
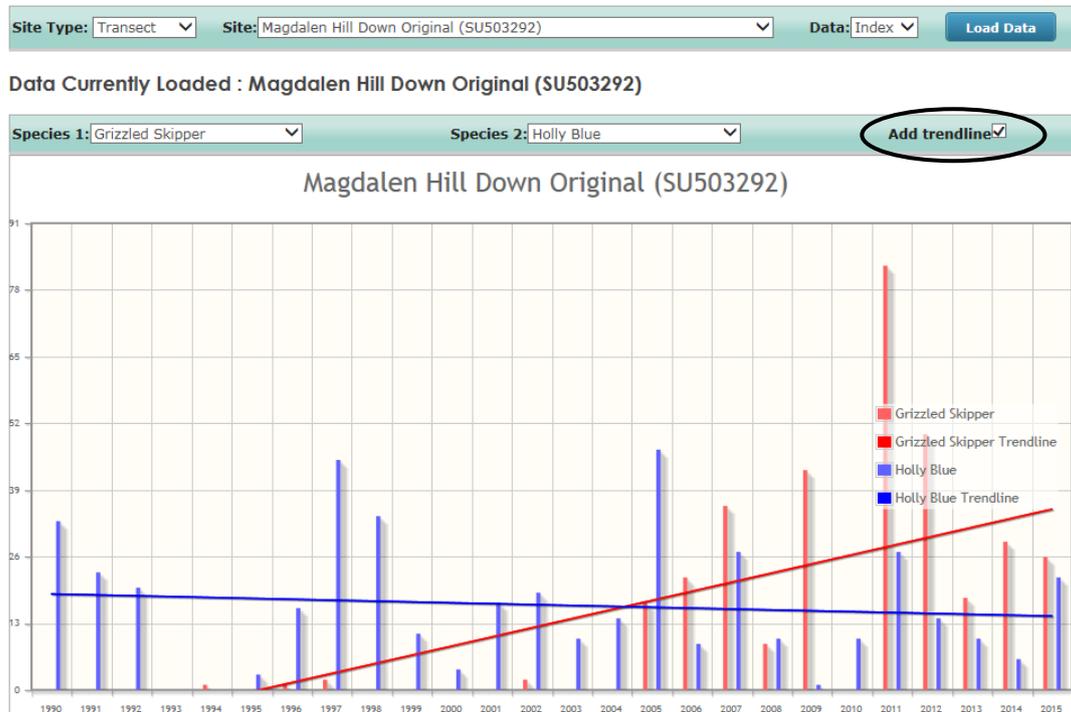
Section Indices

As well as the "Year by Year Index Plot", the new functionality of TransectWalker online allows the long awaited "Section Analysis" to be available once again. This is an invaluable tool for analysis of the preferential use of different parts of the site by different species, and to assess the impact of habitat management in specific parts of a site.

1   To access this information and associated graphical representation, you should firstly select the **Section Plot** option from the top

2   Once the Section Plot has been selected, with the drop-down options that become available, set the **Year** of interest (can include current year based on data so far submitted). Once again, set **Site Type** as **Transect**, and choose your **Site of interest**. In this example we'll select Magdalen Hill Down – Original once again.

3   Once Year, Site Type and Site have been selected, you click the **Load Data** tab.

4   Once the data has been loaded, select your butterfly of interest from the **Species 1** drop-down menu (e.g. Grizzled Skipper). From the **Week Number** drop-down menu, either accept the default **All in-season weeks (1-26)**, or select a specific week of interest. Once selected a histogram will appear showing you the distribution of the species according to data for individual transect sections in the given year of interest. You can even do this in the current year as the season progresses, assuming people enter their data weekly. The graph below shows Grizzled Skipper by Section for 2017 at Magdalen Hill Down (original), up to and including Wk. 5. It shows that the Grizzled Skipper is almost entirely recorded on Sections 1 and 10 of the transect (= the lower slopes).
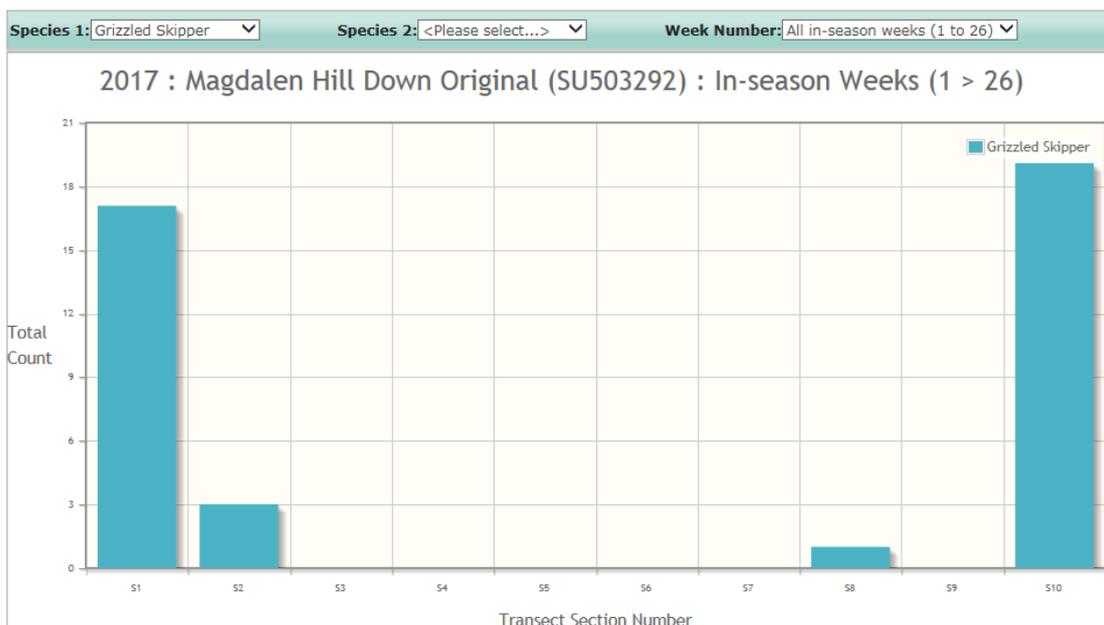
If we look at the complete data for **2016** and compare two species with quite different habitat requirements, such as **Grizzled Skipper** and **Green-veined White**, we can see how different their distributions are across the 10 sections of the transect. The Grizzled Skipper is entirely confined to the Sections 1, 2, 10, representing unimproved chalk downland, whereas the Green-veined White is more widely distributed, and has its highest totals in Sections 4 and 5, which are sheltered hedgerows along the diagonal public footpath that traverses the site (see route at bottom of page).
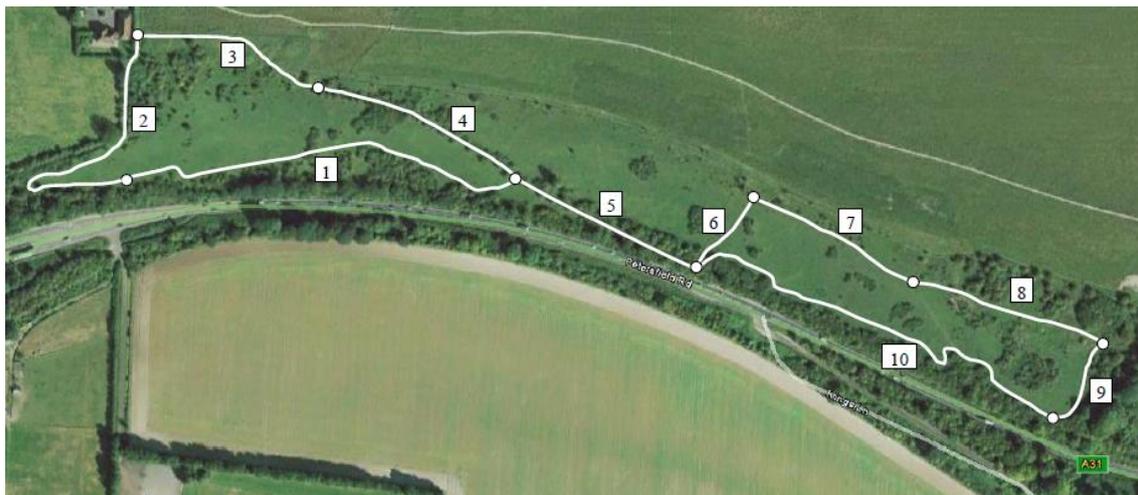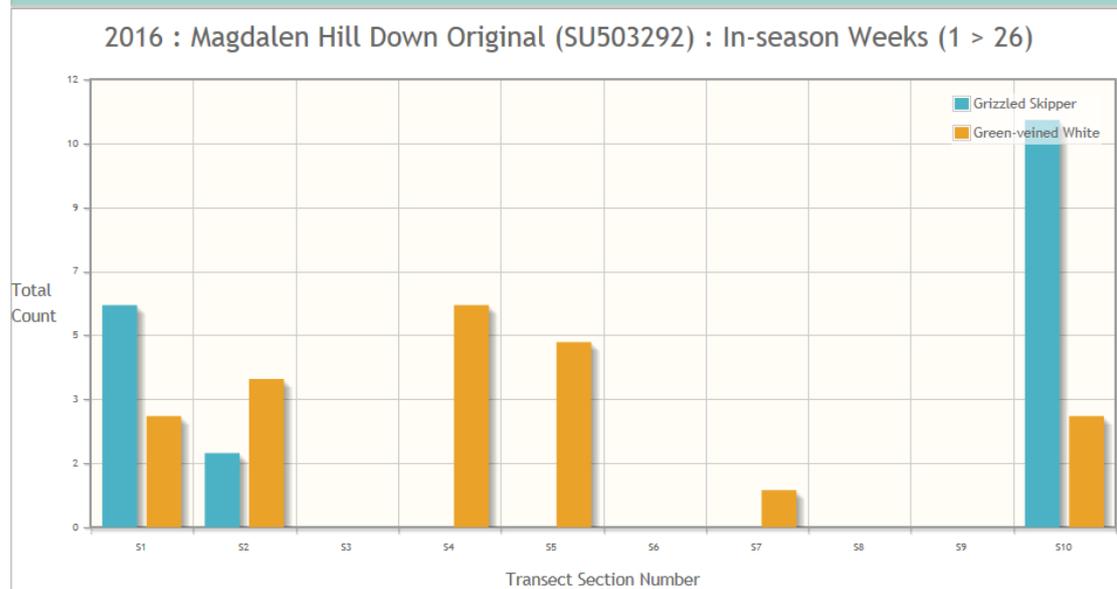
We hope you find these notes helpful in maximising the potential of the data for your transects.

Andy & Linda Barker   9 May 2017.