

Collection Detective: Deciphering the Förster Dragonfly Collection

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Abstract

Friedrich Förster was a German zoologist who traveled the globe around the turn of the twentieth century collecting hundreds of dragonfly and damselfly specimens. After his death, his collection was donated to the University of Michigan for safe keeping, but has remained largely unexplored. In an effort to make the collection and associated data accessible, we are digitizing the Förster collection, and using the data to map where he traveled. To do this, we are systematically imaging the specimens alongside their original labels and adding a scannable unique identification code to identify them within the university's collection. These images are then uploaded to a drive where the labels are transcribed and entered into an organized spreadsheet. The specimens are then returned to their collection case with their new identification number. Given the data collected, the locations will be used to make a comprehensive route of where Förster went and when, as well as what species he found there. Upon completion of the project, all the images and their associated data will be uploaded to the University's main database where they are automatically shared with multiple data aggregators which are accessible to the public and where anyone can access it from around the world. This will be a useful resource for scientists, researchers, and conservationists studying dragonflies from many parts of the world.

Methods

- Specimens from the Förster dragonfly collection were imaged and saved to a folder. (Some example images can be seen in figures 1 and 2)
- Data from each of the specimens' labels were recorded in a spreadsheet
- Locations, if available, were used to generate the map in figure 3.

Fig. 1



Fig. 2



Results

Specimens with a known location were put on the map pictured in figure 3, with different colored markers denoting the year they were collected. The legend identifies which markers denote which year.

Fig. 3



Discussion

In total, 180 specimens were identified from all around the globe, spanning six different continents and 27 countries. They belonged to six different species: Coenagrionidae, Platynemididae, Protoneuridae, Megapodagrionidae, Euphaeidae, and Calopterygidae. Of all the dragonflies and damselflies imaged, a bit less than half of them had available locations to be plotted on the map. Some of these locations were vague, for example just identifying the country of origin with no other details. The dragonflies and damselflies identified do not represent the entire Förster collection; for a complete exploration of the collection all specimens would need to be analyzed in a similar manner. .

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References

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