# Describing Species: A Practical Taxonomic Procedure for Biologists

The process of describing species is a fundamental part of taxonomy, the science of classifying and naming organisms. Species are the basic units of biodiversity, and they play a critical role in the functioning of ecosystems. Describing species is also essential for conservation, as it allows us to identify and protect endangered species.

This book provides a step-by-step process for describing and naming new species. The book is written in a clear and concise style, and it is illustrated with numerous examples. Describing Species is an invaluable resource for taxonomists, biologists, and conservationists alike.



### Describing Species: Practical Taxonomic Procedure for

**Biologists** by Sherene Shalhub

4.7 out of 5

Language : English

File size : 4831 KB

Text-to-Speech : Enabled

Screen Reader : Supported

Enhanced typesetting : Enabled

Print length : 542 pages



#### **Step 1: Collecting specimens**

The first step in describing a new species is to collect specimens.

Specimens can be collected from a variety of sources, including field

surveys, museum collections, and online databases. It is important to collect representative specimens from a variety of populations and habitats.

When collecting specimens, it is important to record the following information:

- The date and location of collection
- The name of the collector
- The habitat where the specimen was collected
- Any other relevant information, such as the behavior of the organism or its diet

#### **Step 2: Examining specimens**

Once you have collected specimens, you need to examine them carefully to identify their distinguishing characteristics. This can be done using a variety of techniques, including microscopy, dissection, and DNA analysis.

When examining specimens, it is important to look for the following characteristics:

- The size and shape of the organism
- The color and texture of the organism
- The presence of any distinguishing features, such as spots, stripes, or patterns
- The behavior of the organism
- The diet of the organism

#### Step 3: Writing a species description

Once you have examined your specimens, you can write a species description. A species description is a formal document that describes the distinguishing characteristics of a new species. The species description should include the following information:

- The scientific name of the new species
- A detailed description of the organism's morphology
- A description of the organism's behavior and diet
- A discussion of the organism's distribution and habitat
- A comparison of the new species to other closely related species

#### **Step 4: Publishing the species description**

Once you have written a species description, you need to publish it in a scientific journal. This will make the description available to other scientists and allow them to verify your findings.

When publishing a species description, it is important to follow the guidelines of the International Code of Zoological Nomenclature (ICZN). The ICZN provides a set of rules for naming and describing new species.

Describing species is a complex and challenging process, but it is also an essential part of taxonomy and conservation. This book provides a step-by-step process for describing and naming new species. Describing Species is an invaluable resource for taxonomists, biologists, and conservationists alike.

#### References

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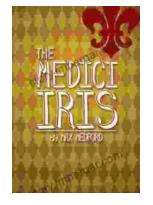
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