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# BIOLOGY TEACHER



## **About Our Cover**

Orb-weaver spiders (family Araneidae) are the third most common group of spiders, numbering approximately 2800 species worldwide. Their webs are often constructed in an intricate spiral or wheel shape with dozens of connecting threads, although some weave what may be characterized as a careless mass spread out over a bush or on the

Typically, female orb weavers are observed most often, as they tend their web and feed, while males are more mobile as they search for a mate. Females lay eggs near the end of fall, and the spiderlings remain in egg sacs, able to survive freezing winter temperatures due to the formation of glycol compounds. The spiderlings emerge in spring with warming temperatures. This particular web was one of scores found by photographer John Stiles on a foggy morning during a walk along the Maine coast near his cabin in the woods. All of the webs had been covered by tiny, perfect, spherical water droplets that had formed on the silk threads, creating a dazzling array of designs, which evaporated shortly after the sun broke through. In this particular locale, arachnid experts have identified more than 300 spider species.

John Stiles is a science education consultant in Bangkok.

# **Contents**

Feature <i>I</i>	Article		
-eature <i>I</i>	Article		

Broadening Student Perceptions of Science through Participatory Data Collection & Research-Education Partnerships: A Case Study in California's Central Valley

Providing students exposure to real-world science, broadening interest in scientific fields of study, and increasing floristic data and herbarium specimen collections in under-sampled areas 

#### An Exercise on Data-Based Decision Making: Comparing the Sustainability of Meat & Edible Insects

Outlining a decision-making strategy for improving the evaluation competence of students that is suitable for teaching socioscientific issues in the context of sustainable development Florian Fiebelkorn, Nils Puchert, Aaron T. Dossey. 522

### **Research on Learning**

#### Learning about Mushrooms Is Influenced by Survival Processing

Determining survival-relevant information retention by secondary school students aligns with evolutionary predictions that can be utilized by science teachers 

#### **Inquiry & Investigation**

#### The Credibility Game

Helping students inquire into the nature of credibility and the problems of expertise, mediated knowledge, and science communication through a series of student-centered activities 

#### Sorting Fact from Fiction: Media Literacy in the Biology Classroom

Developing media literacy skills by evaluating a provided conspiracy theory and a pseudoscience claim and reflecting on the content of the claims, why misinformation matters, and drawing appropriate conclusions

An Evolving Outbreak Simulation Using Active Learning

Giving students visibility to some of the challenges associated with being in charge of an essential research project 



Stressed about Drought Stress: Measuring Plant Physiology in a Rapidly Changing Climate

Engaging students in a climate change discussion regarding the devastation of California wildfires 

#### **Tips, Tricks & Techniques**

### Creating a Board of Curiosity

Fostering a collaborative atmosphere of group accountability by using a fun and easy tool that allows students to ask anonymous questions and perform their own research Holly Basta 560

Reconsidering the Use of the Passive Voice in Scientific Writing Urging educators to greatly reduce their teaching and enforcement of the use of the

passive voice 

# RECOMMENDED FOR AP Biology

#### **Departments**

<b>Guest Commentary</b> • Science: It's Not Always Hypothetical • Paul Strode	. 51
The ABT BioMystery	. 51
Book Reviews • Amanda L. Glaze-Crampes, Department Editor	. 56
Classroom Materials & Madia Payiaws & Leffray D. Sack Department Editor	57