

- Coming up /E2
- Weddings /E3
- Ann Landers /E4

Field biology fascinates

Class findings will help college plan development

By SHARON SHERIDAN
Herald Staff Writer

WANTAGE — After this summer, Diane Schroeder probably will never view mushrooms the same way again.

Schroeder is cataloguing types of mushrooms on a section of the Wirths campus of Upsala College. The project is part of a six-week field biology course at the Wantage property. Other students are surveying everything from insect to medicinal plant populations. The results should help the college plan future development at the 240-acre site, said instructor Jacalyn Willis.

The course fulfills a science requirement for non-

'We don't look at cells and tissues. We look at whole organisms.'

biology majors, Willis said. Schroeder, for example, is pursuing a human-resources degree.

"It's my first course at Upsala, and I really like it," said the Vernon resident. Schroeder said she enjoyed both the hands-on approach and being in a class small enough to get help if a problem arose.

As a class, the students have identified campus trees and visited a local heron rookery. The students also are conducting individual or small-group projects.

Jan Baker of Franklin and two lab partners are surveying the amphibian population at two ponds on the property. They are concentrating mostly on frogs, which can be located by sound, she said. Male frogs



WILD BEAUTY — Laurie Constantin of Hampton, Upsala College, Wantage, look at a butterfly, at left, and Jackie Willis, field biology teacher at which will be identified, recorded and released.

M. David Leeds photos

can to mark their territories and attract mates, she explained.

So far, they have located bull frogs, green frogs and gray tree frogs. The tree frogs are 1½ to 2 inches long and noisy, Baker said. "They are actually louder than the bullfrogs. They sound almost like a cricket."

They also heard a call they believe came from a leopard frog. "Now we have to capture the little bugger."

The students return the frogs to their habitats after catching and identifying them. "I would never harm a frog," Baker said. "That's why I could never take a regular biology course where I had to dissect anything."

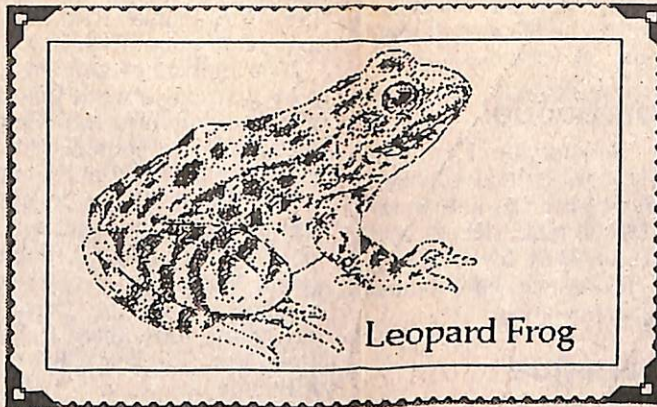
In general, field biology takes a more wholistic approach and focuses on what happens to organisms in their natural environments rather than in a laboratory, Willis said. "We don't look at cells and tissues. We look at whole organisms."

Her own area of specialty is mammal populations. She annually visits a field station in the tropics as part of a Smithsonian project. "I've been doing a census of all of the non-flying mammals on an island in the middle of the Panama Canal."

"It's been fun," she said. "The Smithsonian is about the only organization I know that seriously supports long-term research on natural populations. They have a commitment to understand what kind of population fluctuations occur naturally in a tropical ecosystem. They're looking towards getting baseline information

that will be useful in conservation efforts in the near future."

The data collected in the Upsala course also will find uses beyond the classroom. Ultimately, the idea is to use the information toward an environmental assessment of the resources on campus that in turn can guide the site's future development, Willis said.



Leopard Frog

"It's interesting, because nobody's done this on the campus before," she said. The campus has a diversity of habitats, ranging from farmlands to old forests, she said.

Before the group headed into those habitats, Willis discussed the dangers of Lyme disease, which is car-

ried by ticks, and rabies, which any warm-blooded animal can contract. She talked about how to dress to avoid picking up ticks, how to deal with ticks and the importance of staying away from animals acting strangely.

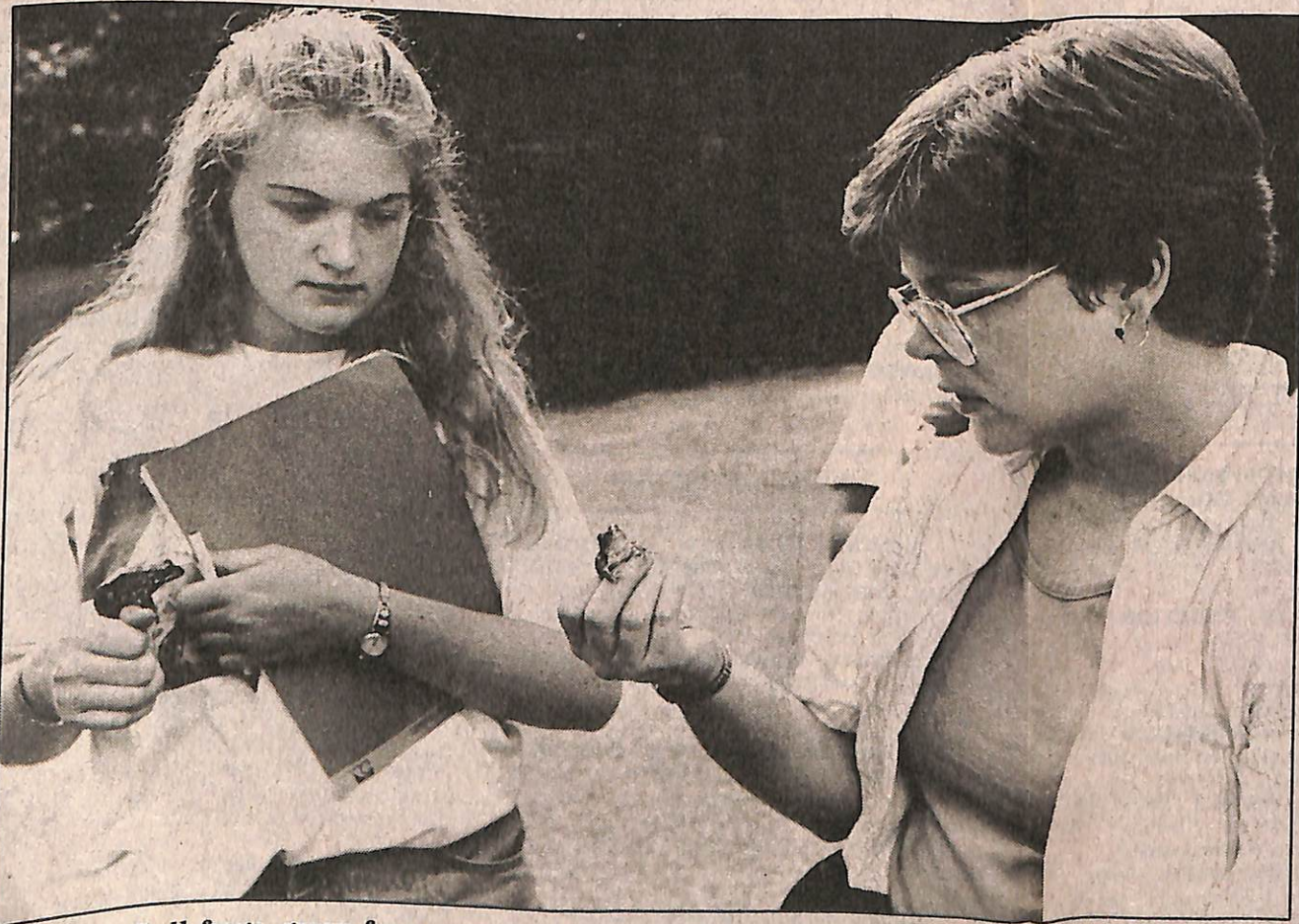
For at least two of the students, the information-gathering process extends beyond collecting specimens on campus. Robin Chandler of Wantage and her partner are studying the medicinal plants used by the Lenape, the Indians who once inhabited the area. Their research has included interviewing people such as John Kraft, who helped develop the Lenape exhibits at Waterloo Village in Byram, and James Lone Bear Revey, who is of Lenape descent.

All aborigines, or the first inhabitants of a country, used herbal plants and "had a very deep awareness of their place in the universe," Chandler said. "I think we have a lot to learn from them."

Today, scientists are exploring the possible healing properties of plants that aborigines used, such as milkweed, she said. "I know that in the Amazon they are actually looking for a cure for cancer."

"My premise was, there could be plants here that the aborigines used. I'm taking the Lenape because they are the people of our area."

"I'm afraid it's a culture that's going to disappear on us and with it the knowledge that can never be replaced," she said. "I'd like to, if I can, to help revive that interest and hopefully preserve some of the culture."



FROGS — Bull frogs, green frogs, gray tree frogs and even a leopard frog — Abbie West of Vernon, at left, and Jan Baker of Franklin know the difference thanks to the field biology class.



GETTING ACQUAINTED — Diane Schroeder of McAfee, Vernon, gets acquainted with a frog.