Animal Behavior Websites

Website design can be a very effective means of communication. In science we use websites to advertise our own work, recruit students to our labs, convey the breadth of our research interests, discuss immature ideas, solicit collaborations, disseminate supplementary data, host databases that may be of use to other researchers in our field, organize our courses, advertise conferences, and generally communicate with scientists and the public around the world.

Students will work in pairs to design and create a website to summarize the current scientific understanding of a specific animal behavior. The summary must include information relating to each of the four main areas of behavior as outlined by Tinbergen (1963). Because some model organisms are more suited to specific types of research, it may be necessary to incorporate research from multiple organisms in order to discuss the ontogeny, mechanism, phylogeny and adaptive value of the specific animal behavior. While books, websites, and newspapers may be used, the majority of the information presented should be supported by primary literature and all sources must be cited (including images). When appropriate, students should include historical perspective. The completed websites will be hosted on the web with students' permission.

Evaluation:
Websites will be evaluated according to the "web critique" criteria. Students are expected to have a completed website by the draft due date. This draft will then be "polished" after receiving peer review. Both the draft, and the final product, as well as the critiques will be part of the total grade for this project.

- **Draft - 25%**
- **Critiques - 10%**
- **Final product 65%**

See past years examples and templates at :
http://academic.reed.edu/biology/courses/bio342f06/index.html

Schedule:
Week 4 During Lab
Form pairs and pick topics

Week 5 During Lab
Dreamweaver demo and project initiation:
By now you should have chosen a partner (in your lab section) and have a topic in mind.
You will:

1. Pick which template you want to use
2. Create a "site" folder with your chosen templates.
   Create a home page with:
   a. the title.
   b. a brief outline and/or bullet points (to be expanded later).
3. Create 5 sub-topics pages to be filled with information later.
   a. MECHANISM
   b. ONTOGENY
   c. PHYLOGENY
   d. ADAPTIVE VALUE and
   e. REFERENCES
4. Experiment with colors and text styles using the style sheet
5. Learn to create internal and external links
6. Learn to add images to your webpage.
7.

You will save a rough outline draft to the server

Tuesday November 3rd @ 5:00 PM
All websites must be posted on the courses server by 5:00 pm.
The websites should be ready for public viewing. It is each student's responsibility to check that all images and links are functional from any computer on campus. If you have failed to create correct relational links and images they may work on your own computer but not when viewed across the web. Please seek advice before noon today for assistance.

Students will be assigned 3 websites to critique.

November 11th Constructive critique is due in class.
These critiques will be delivered to the webpage authors

Tuesday December 1st Final websites, incorporating the critique comments, must be posted on the courses server by 5:00 pm. They will be linked to create a webpage for the course.

General Instructions

Before creating a website take the time to plan what is needed by considering the audience, defining the purpose and deciding the content. These same considerations are required for writing a scientific paper. For a scientific paper you decide which journal you want to send it to, decide whether you are targeting molecular biologists, ecologists or general scientists, decide whether you want to report the facts or revolutionize your field, thus you decide which results to include and how much background information.

Audience

Defining the audience is a key step in the website planning process. The audience is the group of people who are expected to visit your website. When considering who is most likely to need/use the website, it can be helpful to make a list of characteristics common to the expected users. Taking into account the characteristics of the audience will allow an effective website to be created that will deliver the desired content to the target audience.

Your audience will include, you instructor, your classmates, prospective reed students, animal behavior enthusiasts from around the world, and scientists from the field of animal behavior.

Purpose

It is essential to define the purpose of the website as one of the first steps in the planning process. A purpose statement should focus on what the website will accomplish and what the users will derive from it. Your purpose might contain phrases such as “report on an exciting new finding in XXXX”, “educate web readers about XXX behavior”, "provide a comprehensive review of behavior XXXX" etc. As you work, keep your purpose statement in mind. Continually ask yourself if each aspect of the website fits with your planned purpose. This will help you to create a focused website.

Content

Content evaluation and organization requires that the purpose is clearly defined and the audience is specifically targeted. The first step is to create a list of the necessary content. Next, this list must be organized according to the audience's needs. In the process of gathering the content, any items that do not support the defined purpose or accomplish target audience objectives should not be included in the final website. The next step in the process is categorizing the content and organizing it according to user needs. Each category should be named with a concise and descriptive heading that can become a link between parts of your website. Planning for the site's content ensures that the wants/needs of the target audience and the purpose of the site will be satisfied.

Writing style

In science we are often trained to write in a “pyramid style”: starting with background information, and gradually building to the conclusion. Often we start our papers with a hypothesis or an outline of specific aims. Journalists, on the

other hand, often use and “inverted pyramid”: starting with the conclusion, followed by the most important supporting information, and ending with the background. This allows readers to stop anytime and still obtain the most important information. On the web, studies show that viewers rarely “scroll”, thus an “inverted pyramid” style is probably most appropriate.

To draw users into the text and support scannability, use well-documented tricks:
* add subheads to the text
* highlight keywords in the text
* keep the paragraphs short
* use an inverted pyramid style (see above)
* keep the writing style simple
* eliminate (or define) jargon.

Structure
Users are highly goal-driven on the Web. They visit sites because there's something they want to know. The ultimate failure of a website is to fail to provide the information users are looking for. Since users don't have time to read everything, hidden info might almost as well not be there. Researchers have tracked eye-movement as viewers scan the website and found that most people scan ~ 2 rows horizontally followed by a vertical sweep along the left side (an “F” pattern), almost regardless of the web layout. Therefore it is often possible to place important content where you expect stereotyped scanning.

Microcontent:
(including this sort of content will give you a chance to delve in the code)
Search engines are the most important way users discover websites. A humble “page title” is a good tool to attract new visitors. This is not necessarily the same text as appears as the title on the webpage. The “page title” is contained within the HTML <title> tag. It is used as the clickable headline returned on the search engine result pages (usually 66 characters or less).

You will be using Dreamweaver to build your websites. This software allows you to work in the layout format which looks (and works) similar to preparing a power point slide (but a bit more involved). Dreamweaver also allows you to work directly in the HTML code. When you work in the splitview mode, Dreamweaver does the coding for you but shows you what is being done. When you make a change you can see how the code changes, so you will probably learn some HTML code without even trying, or you can learn a lot if want. Dreamweaver is a very powerful but also fairly user friendly piece of software. (If you prefer to use freeware there is plenty available. I recommend NVU). Dreamweaver is available on Reed Campus computers and also on the course lab computers. A 30 day free trial version of Dreamweaver can also be downloaded for free to your own computer. (I recommend not installing your free trial version until only 30 days before you turn in the assignment because an expired trial license will not be an accepted late excuse.)