

### Natural Habitats – A Lesson in Animals' Lives

This plan was modified from one originally designed for first grade students. I have taken an existing plan and formalized the design and description for the purposes of this assignment. The range of students' reading abilities in the target class was quite wide, from very basic to fairly advanced. The main objective is for the students to understand the basic concept of *habitat* as the physical environment in which an animal lives and to be able to create a fact book and diorama that show their mastery of the concepts with respect to a particular local wild animal of their choice. The lesson assumes some student familiarity with such concepts as animals' eating habits and time of day of activity. (In our class, we had had a school visit of staff from a local wildlife sanctuary about nocturnal and twilight animals, and had discussed what animals eat, so the children had exposure to terms such as nocturnal, crepuscular, diurnal, carnivore, etc.) To relate the information to their own experiences students will identify the natural habitats of our town and the animals that inhabit them. Each child will be choosing an animal to focus on and will produce a fact book about the animal, as well as a diorama of the animal's main habitat, including a model of the animal. This is a complex lesson and it could include a variety of sources of information, including videos related to habitats and a choice of reference books from the school library from which the children are expected to extract pertinent facts about the habitat and habits of their animal. The lesson can be divided into three broad segments. The pre-reading/thinking segment will introduce the concept of habitats and will involve brain-storming and discussion. The reading/thinking segment will include the video on habitats, a reading to the class of a picture book on habitats, 2 field trips and the research using the guide and reference books from the library. Post-reading/thinking will include the production of the fact book and diorama. These three phases can be loosely related to the three phases of the instructional framework described by Steven & Brown (2005): Initiating, Constructing and Utilizing.

**Initiating or Pre-Reading/Thinking phase** – Where things live: an introduction to habitats.

#### **Activities:**

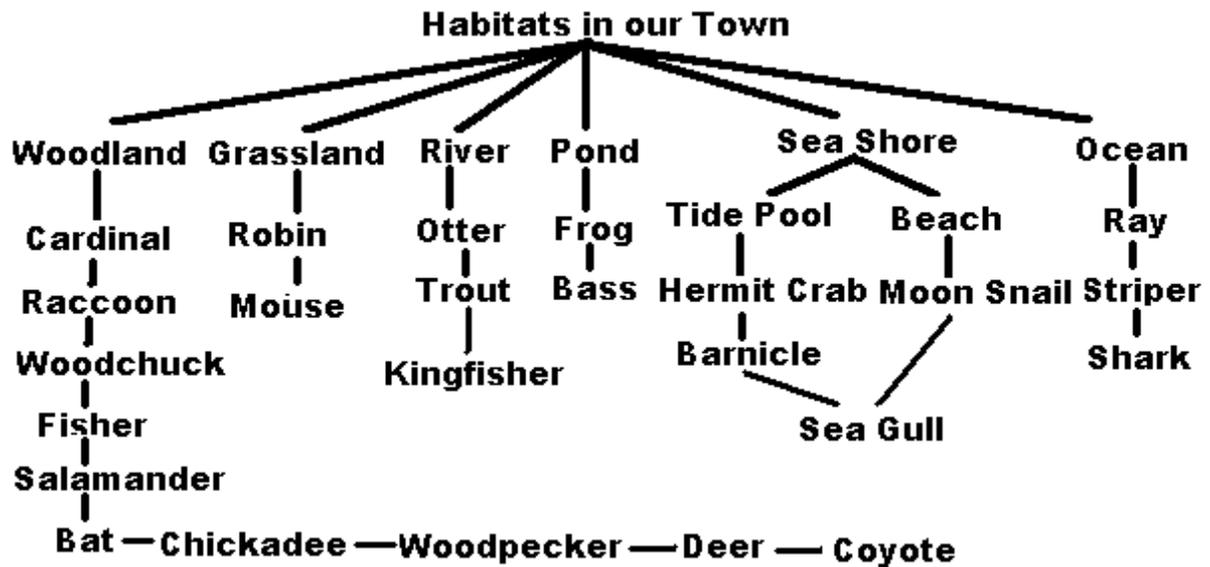
**Introduction** - The teacher initiates the lesson by writing the word “habitat” on the board. He asks the students for a definition and guides them to the definition “where something lives.” This can be

followed with a short discussion about where people live. Pictures of apartment buildings, tents, igloos, and the teacher's own house are useful props to start the exercise. A useful pass-out here would be a list of the vocabulary words and phrases that the teacher wants the students to master, with spaces for the students to fill in the definitions in their own words as the lesson progresses. The definition for “habitat” can be filled out before the lesson, or the teacher can take time to have the students write it in during the introduction phase. My list for this lesson includes habitat, woodland, grassland/meadow, river, pond, sea shore, ocean, energy source, food source, water source, diurnal, crepuscular, nocturnal, carnivore, herbivore, omnivore, the last 6 being review words from earlier lessons.

The introduction phase focuses the children on the subject of the lesson.

**Brainstorming** (Stevens & Brown, 2005) – The teacher then moves the discussion to wild animals, and asks the students to brainstorm by naming wild animals that live locally and where they live. The teacher writes these on the board. It would be useful to have pictures of various habitats to add a visual component. Also, as the students mention the various animals the teacher can begin to create a topic web (Sedita, 2008) to add structure to the information being written down. See below for a sample:

For our town (very habitat rich!) the larger categories would be woods, meadows and fields, rivers and ponds, freshwater wetlands (vernal pools, swamplands), saltwater wetlands (marsh), seashore (dunes, beach, tide pools) and the ocean. If a student offers an animal that the teacher knows or suspects does not occur naturally locally, the teacher should open up the discussion about whether the animal is appropriate. Brainstorming will focus the students' onto the subject, and will enable them to become aware of their own exiting knowledge of habitats and the animals they might contain. The topic web will help the students organize the information they see on the board.. A sample is shown below.



**I am curious** (Stevens & Brown, 2005) - The students go back to their group tables. Each table develops a set of 3 to 5 items that they think they will be learning about or want to learn about during this lesson. At the end of the allotted time, each table reports on their items or questions. This activity starts the students thinking creatively about the subject of habitats and also helps them to tap into their existing knowledge to formulate new ideas.

**Reading/Thinking Phase** – Gathering information to help with the final project. Based on the list of local animals developed in the initiation phase, the students have chosen their focus animals. They now have 3 sheets to fill out during this part of the lesson: the vocabulary sheet and two others in 2-column note format. These will be described further below. The data gathering can be of several sorts. We are fortunate enough to be very close to 2 nature preserves, one of which includes woodland, grassland, river, pond and freshwater wetlands habitats. The other is at the shore and includes saltwater wetlands, sandy beach, dunes and tide pools. Field trips to these, a general video about habitats, and a good selection of general and specific field guides and descriptive picture books form the material which the students will be using to gather data.

**Activities:**

**10 Most Important Words** (Stevens & Brown, 2005) - This is a variation of the technique described by the authors. The method is meant to help students learn how to identify key ideas in their reading and thinking. Because of the level of the readers involved, and since the information sources are so varied, the key words are already supplied in the list mentioned earlier. (Remember that the last 6 items on my list are review words that the children have been previously exposed to.) Since the key concepts terms are supplied, the teacher should help the students point out when they appear during the reading/thinking phase.

**2-column note taking** (Sedita, 2008) – The other sheets provided for the students are both meant to be used in the 2-column format described by Sedita. In the left-hand column go the main ideas, and in the right hand column go supportive details. As with the 10 most important words, the main ideas are already supplied, again because of the experience level of the target students. Use of the 2-column note format helps more advanced readers tease out the most important concepts in a text. By providing a sheet in which the main concepts are supplied and some details must be written in while others are simply circled, the students at this level are made familiar with the format and can focus on the details. The sample sheet is shown below.

The name of my animal is	<b>Little brown bat</b>
It's scientific name is	<b>Myotis lucifugus</b>
My animal is	Diurnal <u>Nocturnal</u> <u>Crepuscular</u>
because it is most active	during the day <u>at night</u> at sunrise (dawn) <u>at sunset (dusk)</u>
My animal's habitat is	<i>woodlands</i>

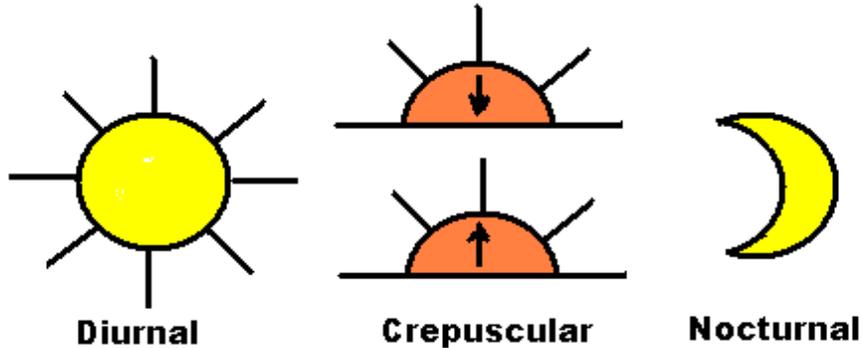
A <u>woodlands</u> habitat has	<b>Lots of trees</b>
The energy source is	<b>The sun</b>
The water source is	<b>Ponds, streams, river</b>
The food source is	
My animal is	Omnivore Carnivore <u>Insectivore</u> Herbivore
Because it eats	<b>insects</b>

**Post-reading phase** – During this phase, the students will be solidifying and then demonstrating their mastery of the concepts of habitats by describing their chosen animal in the context of where and how it lives. As younger students are very concrete, I have included a picture book and diorama as activities. A teacher may choose either or both. I will have the students tell about their animal using the diorama as a prop and have the picture books on display with the dioramas so that others can learn the facts about each animal and its environment.

**Activities:**

**Creating Content-related Picture Books** (Stevens & Brown, 2005) – Teachers may want to follow the structure of the picture book that I offer, or design their own version more suitable for their students. Each book as I have envisioned it is formed of X pages formed by index cards stapled at the short end and follows the same format: On the cover is an illustration of the animal with the title “The \_\_\_\_\_ Book” above. The scientific name is written on the bottom of the cover. The first page is a labeled illustration of the primary habitat (eg. Woodland) (After the front cover, the labels are on the left-hand page and the illustrations on the right. All illustrations are labeled.) The energy source (always the sun for this lesson. The main purpose here is to get

the kids to draw and color the sun without a smiley face!) and water source(s) of the habitat follow. Next is an illustration of the food eaten by the animal, with its eating type (eg, coyote – small animals, carnivore). The final page shows the time of day that the animal is most active. I will have the kids illustrate with one or more of the following symbols:



**The Storyteller** – This is a variation of the technique described by Stevens and Brown (2005) and named by them “The Instant Storyteller.” The subject of the story is the student's chosen animal. To prepare for this, each student will make a shoebox diorama which includes a model of the animal, energy and water sources, the primary habitat, and food. Each student comes before the class and gives a presentation in which she describes the animal and its habitat. After each presentation, questions are taken from the other students. The questions are vetted by the teacher and must be germane to the verbal presentation. Questions about diorama technique are not allowed! From a practical standpoint, to prevent audience burnout I plan to do this a few at a time over several days. By having to describe the diorama, which has to be approved by the teacher before it is considered complete, the student will be able to solidify her knowledge.

**References:**

Allen, J. (2004). *Tools for Teaching Content Literacy*. Portland, ME: Stenhouse Publishers.

Sedita, J. (2003, revised 2008). *The Key Three Routine: Comprehension Strategy Instruction*. Danvers, MA: Keys to Literacy.

Stephens, E.C. & Brown, J.E. (2005). *A Handbook of Content Literacy Strategies*. Norwood, MA: Christopher-Gordon Publishers, Inc.

Comment from the professor:

David, I enjoyed reading your STP. You have made content area information a concrete learning experience for first graders. Your chosen tools (with modifications) are very appropriate for your students. You gave a good clear introduction which described your students and outlined your objectives. Your lesson plans were easy to follow as well.