

Teacher's Guide for ODYSSEY, *Night Life*

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Betty Lou Askin, a retired educator who lives in Toronto Ontario, prepared this guide.

Disappearing Act (pages 2-3)

- Provide 2 reasons why the missing bees creates a large problem
- What is the scientific name of the vanishing bees?
- Describe 2 possible theories for the missing bees.
- Explain why loner bees may help the situation.

Surprise! (pages 4-5)

- How were Northern Hemisphere people able to view Comet McNaught?
- Why was Comet McNaught's tail so spectacular?
- Explain a possible link between comets and Earth.

Who Built Stonehenge? (page 5)

- What is Stonehenge?
- Why is the ancient village an important discovery?

Sensing the Night (pages 6-10)

- A) What is the meaning of the following: **crepuscular** and **nocturnal**
- B) List creatures that are active during those times.
- Explain how bats "see" in the night.
- Name some creatures that use echolocation.
- Describe some of the owls mentioned in this article.
- Explain why birds are similar to navigators.
- What are the migrating flyways preferred by birds?
- Describe how some creatures sense or feel another's presence.
- How do rattlesnakes "see" at night?
- How does **tapetum** help some creatures see at night?
- If you are allowed to go outside after dark, or accompanied by an adult, find out what night creatures and sounds can be found in your area.

Pollinators: Working the Night Shift (pages 12-16)

- Describe the steps in pollination.
- Why should we be grateful to pollinators?
- Explain why pollination is a "by product" of bees.
- How does a loner female bee differ from a queen bee in a hive?
- Describe how the eyes of a nocturnal bee differ from a regular bee.
- Tell how a white-lined sphinx moth collects nectar.
- Name vertebrate animals that pollinate.

Days of Our Lives (pages 18-21)

- Explain how living things have a "built-in" alarm clock.
- Use your own words to explain **circadian rhythm**.
- Tell how the sun keeps us on schedule.

- What aspects have influenced circadian rhythms?

Light Up Your Life! (pages 20-21)

- Describe the condition of SAD and its causes.
- Explain how SAD can be treated.
- Why is melatonin important to us?
- Research: Ask the students to complete some research on SAD. They could then prepare a brochure that would inform the public about SAD.

Batty About Bats! (pages 22-25)

- Are bats vegetarian or carnivorous?
- Describe some of the roosting places of bats.
- Explain how bats with poor vision can locate their prey.
- Are bats smart? Explain your answer.
- Explain how bats help the ecosystem.
- Describe ways to ensure that bats do not become extinct.
- How do moths protect themselves from bats?

“Vampiro” (page 26)

- List 6 things that you learned about vampire bats.

Coral Reefs: The Changing of the Guard (pages 30-34)

- What is a coral reef?
- Look at the pictures on pages 30-33 and complete this chart.

What I see.	What I hear.	What I smell.	What I feel.

- Describe the actions of the day shift within a coral reef.
- Describe the actions of the night shift in a coral reef.
- Why does coral “blossom” at night?
- If you were a night fish, why would you choose to be red? Why would you have large black eyes?
- How do some day fish get ready for “bed”?
- Tell how some fish protect their spawn from daytime fish.
- How do parrotfish protect themselves?
- Report Writing:
Pretend that you have just finished snorkelling in a coral reef. Prepare a report to present to a magazine. Include drawings/pictures of your experience.

Creatures from the Black Lagoon (pages 35-38)

- How does an alligator spend its days?
- Column 2 on page 36 describes many night noises. Explain what those noises might tell us about what is happening.
- Describe how the alligator is the “most advanced of all the reptiles”.
- How does an alligator stalk its prey?
- Tell how we know that an alligator has a bad temper.
- Explain why an alligator could be called an engineering environmentalist.

Dark Dwellers (pages 41-43)

- Describe the habitat of the gopher tortoise.
- Explain the technology used to study the gopher tortoise.
- What aspects are studied with this technology?
- Explain what they have learned about a burrow's size.
- Why do you think this species of tortoise lives in a burrow?
- How does an egg become male or female?
- Creative Writing:
You are a scientist who studies gopher tortoises. Keep a journal of your findings during a week's study. Use your imagination and information from this article to complete the task.

Culminating Activity:

Assign the following task to each of several small groups of students. Ask the students to choose a creature from this magazine. Each group should design an advertising campaign to ensure that their creature does not become extinct. Their work should include posters, information for magazines and newspapers, possible video commercials and interviews.