An online exploration of the biotic communities of Arizona with an emphasis on Language Arts and Social Studies

Exploring Arizona's Biotic Communities

Lesson 3: A Day in the Life ...

LESSON OVERVIEW

In this lesson, students will explore Arizona's biotic communities by using online resources to research an animal or plant that might be found in a particular community. Once the research is complete, they write a narrative essay about their plant or animal.

SUGGESTED GRADE LEVELS

- 6 – 10

ENDURING UNDERSTANDINGS

- Plants and animals are adapted to survive in the environment in which they live.

OBJECTIVES

Students will:

- Research online and in texts, determining relevant information and taking accurate notes.
- Put researched information in their own words.
- Write a narrative essay.

ARIZONA DEPARTMENT OF EDUCATION STANDARDS

Grade	Reading	Writing	Social Studies
6	S3-C1-06; S3-C1-09	S1-C3-01; S1-C3-07; S1-C4-04; S2-C1-01; S2-C1-03; S2-C1-04; S2-C2-03; S2-C2-05; S2-C3-02; S2-C3-04; S2-C4-01; S2-C4-03; S2-C5-02; S3-C1-01	None
7	S3-C1-06; S3-C1-10		None
8	S3-C1-06; S3-C1-10		None
9	S3-C1-04; S3-C1-08	S1-C3-01; S1-C3-07; S1-C4-04; S2-C1-03; S2-C1-05; S2-C2-03; S2-C2-05; S2-C3-02; S2-C3-03; S2-C4-01; S2-C4-02; S2-C4-03; S2-C5-03	None
10	S3-C1-04; S3-C1-07; S3-C1-08		

Note: The full text of these standards can be found in Appendix A.

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TIME FRAME

- 4 days (1 day of in-class research, 3 days of individual work outside of class)

MATERIALS

- *Student Assignment Cards*
- *Life in a Biome* Newsletter/Rubric (one per student)
- *Author Self-Reflection* (one per student)
- *Peer Editing Guide* (one per student)
- Access to Internet for individual students
- Grade-level-appropriate print materials from your library
- Copies of scoring rubric (1 per student)

TEACHER PREPARATION

- Review suggested Web sites to ensure their appropriateness at the grade level being taught.
- Ask your librarian to assemble a collection of print materials for students to use in their research.
- Create heterogeneous student teams. These may be the same ones used in Lesson 1: Mapping Biotic Communities.

SUGGESTED PROCEDURES

1. Students should be familiar with the online information about Biotic Communities before this lesson. See lessons 1 and 2 for more information.
2. Assign students to a "Biotic Community" for this activity. Due to its lack of plants and animals, exclude "Alpine Tundra." Adjust the number of groups as necessary for your class size. For example, you may need to combine all of the grasslands or all of the deserts into one category.
3. Using the prepared animal and plant "cards," students draw a card and research that member of their biotic community. Allow students to trade cards within their group if you like. Be sure each biotic community includes at least two plants and two animals.
4. Remind students about research procedures and note-taking expectations for their grade level.
5. Hand out the *Life in a Biome* newsletter and rubric. Assign the essay topic: "A Day in the Life of _____." Students use the information they learn while researching their plant or animal to write a narrative essay describing the climate, terrain, and other animal and plant encounters their plant or animal might have during a typical day in that biotic community.
6. Make sure the students understand the requirements outlined in the rubric.
7. Review (or introduce) formatting requirements for a bibliography in the style you prefer (MLA or APA; information on both is available online). Be sure the students understand that information must be put into their own words, not quoted from their source!

8. Allow several days research time in or out of class. You might schedule time in the library the first day to allow students to locate print information. Schedule time on the computer for Internet searches. The Web sites included are only a few of many available. You may want to pre-select others (or include a brief lesson on validity and reliability online) to ensure quality information. NOTE: If you plan on using Lesson 4 – Which Team are You On, you should alert students to be looking for photographs or drawings of their plant or animal.
9. Set a peer review day for each team to edit/critique their teammates' papers. Use a Peer Editing Guide to help students make specific suggestions for improvement. Emphasize that the author is the ONLY one who can make changes or corrections to the paper, but encourage authors to look seriously at the comments. For more information on peer editing, see Appendix B.
10. Set a due date for revised essays. Before you collect the paper, ask students to reflect on the essay by answering three questions:
    a. What did you learn by writing this essay?
    b. What do you like best about the paper?
    c. What next?
11. Students should write their answers on the back of the last page or on another piece of paper they attach to their essay. Allow teammates a final double-check for completeness. The peer editing and rough draft should be turned in along with the final draft.

ASSESSMENT

- "A Day in the Life …" essay using the rubric provided
- Self-assessment

EXTENSIONS

- Students might write a more formal research paper using endnotes and a list of works cited.
- Students could partner with another whose animal or plant is related in some way and create a skit illustrating the relationship.
- Make a class booklet with the plant and animal stories arranged in biotic communities. Include drawings or photographs of each one.
- "Adopt" another class (preferably of a younger grade level) and have the students read their stories to the children.

Appendix A: Arizona Department of Education Standards – Full Text

Reading Standards

Grade	Strand	Concept	Performance Objective
6	3	1 – Expository Text	6 – Locate appropriate print and electronic reference sources (e.g., encyclopedia, atlas, almanac, dictionary, thesaurus, periodical, CR-ROM, Web site) for a specific purpose 9 – Draw valid conclusions about expository text, supported by text evidence
7	3	1 – Expository Text	6 – Locate appropriate print and electronic reference sources (e.g., encyclopedia, atlas, almanac, dictionary, thesaurus, periodical, CR-ROM, Web site) for a specific purpose 10 – Make relevant inferences about expository text, supported by text evidence
8	3	1 – Expository Text	6 – Locate appropriate print and electronic reference sources (e.g., encyclopedia, atlas, almanac, dictionary, thesaurus, periodical, CR-ROM, Web site) for a specific purpose 10 – Make relevant inferences about expository text, supported by text evidence
9	3	1 – Expository Text	4 – Organize information from both primary and secondary sources by taking notes, outlining ideas, paraphrasing information; and by making charts, conceptual maps, learning logs, and/or timelines 8 – Support conclusions drawn from ideas and concepts in expository text
10	3	1 – Expository Text	4 – Organize information from both primary and secondary sources by taking notes, outlining ideas, paraphrasing information; and by making charts, conceptual maps, learning logs, and/or timelines for a research document of other assigned task 7 – Make relevant inferences by synthesizing concepts and ideas from a single reading selection 8 – Support conclusions drawn from ideas and concepts in expository text

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Writing Standards

Grade	Strand	Concept	Performance Objective
6, 7, 8	1	3 – Revising	1 – Evaluate the draft for use of ideas and content, organization, voice, word choice, and sentence fluency 7 – Apply appropriate tools or strategies (e.g., peer review, checklists, rubrics) to refine the draft
		4 – Editing	4 – Apply appropriate tools or strategies (e.g., peer review, checklists, rubrics) to edit the draft
	2	1 – Ideas and Content	1 – Use clear, focused ideas and details to support the topic 3 – Develop a sufficient explanation or exploration of the topic 4 – Include ideas and details that show original perspective
		2 – Organization	3 – Place details appropriately to support the main idea 5 – Construct paragraphs by arranging sentences with an organizing principle (e.g., to develop a topic, to indicate a chronology)
		3 – Voice	2 – Convey a sense of identity through originality, sincerity, liveliness, or humor appropriate to the topic and type of writing 4 – Choose appropriate voice (e.g., formal, informal, academic discourse) for the audience and purpose
		4 – Word Choice	1 – Use accurate, specific, powerful words that effectively convey the intended message 3 – Use vocabulary that is original, varied, and natural
		5 – Sentence Fluency	2 – Create sentences that flow together and sound natural when read aloud
	3	1 – Expressive	1 – Write a narrative that includes: a. an engaging plot based on imagined or real ideas, observations, or memories of an event of experience b. effectively developed characters c. a clearly described setting d. dialogue, as appropriate e. figurative language, or descriptive words and phrases to enhance style and tone

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Writing Standards Continued

Grade	Strand	Concept	Performance Objective
High School	1	3 – Revising	1 – Evaluate the draft for use of ideas and content, organization, voice, word choice, and sentence fluency 7 – Apply appropriate tools or strategies (e.g., peer review, checklists, rubrics) to refine the draft
		4 – Editing	4 – Apply appropriate tools or strategies (e.g., peer review, checklists, rubrics) to edit the draft
	2	1 – Ideas and Content	3 – Provide sufficient, relevant and carefully selected details for support 5 – Include ideas and details that show original perspective and insights
		2 – Organization	3 – Place details appropriately to support the main idea 5 – Employ a variety of paragraphing strategies (e.g., topical, chronological, spatial) appropriate to application and purpose
		3 – Voice	2 – Convey a sense of identity through originality, sincerity, liveliness, or humor appropriate to the topic and type of writing 3 – Choose appropriate voice (e.g., formal, informal, academic discourse) for the application
		4 – Word Choice	1 – Use accurate, specific, powerful words and phrases that effectively convey the intended message 2 – Use vocabulary that is original, varied, and natural 3 – Use words that evoke clear images
		5 – Sentence Fluency	3 – Demonstrate a flow that is natural and powerful when read aloud

Appendix B: Peer Editing

There are a number of successful ways to conduct peer editing in your classroom. One method is described below. These procedures can be used by themselves or in conjunction with the "Peer Editing" student worksheet included.

1. Students get together in their biotic community teams. Give each teammate a different color highlighter or colored pencil to use in editing. Before you begin any peer editing, it is critical that all students understand the importance of sincere, careful editing. The idea is to improve everyone's skills (and grade!) by offering helpful criticism.
2. Students should complete the *Author Self-Reflection* sheet or answer similar questions on a blank sheet of paper.
3. Students pass their papers to their right and read both the author's comments and the paper. This continues until each paper is returned to the author with all the editors' comments.
4. On the cover sheet the author has attached, each editor responds to the following prompts:
    a. Write a sentence describing what you like about the essay.
    b. Question the author about any area that is not clear to you.
    c. What can the author do to improve this paper? Be specific.
    d. Respond directly to the author's stated concerns.
5. Finally, each editor focuses on a specific writing trait by answering the following questions:
    a. Editor #1: Has the author described the terrain, climate, and other animals and plants in sufficient, entertaining detail? Underline (or highlight) words and sentences that do an especially good job of description.
    b. Editor #2: Has the author described a typical "day in the life"? Underline actions that are characteristic of the plant or animal.
    c. Editor #3: Does the author use a *voice* that is appropriate and effective for his/her plant or animal? Underline words that reveal the author's unique voice.
6. Authors get their own paper back on the final pass. They should review each editor's comments, clarify what is meant if they are not sure, and thank each other for their help.
7. Authors take the peer editing sheet and their rough draft home to revise. They may choose to accept or reject their editors' suggestions.
8. When the final draft is turned in, these papers should be included.

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Appendix C: Suggested Research Web Sites

Below is the list of additional plants and animals to include in each biotic community as well as some suggested Web sites that the students may use for research. It is recommended that you review the Web sites before using them with students.

FIR FOREST

Arizona Bugbane
- http://www.azgfd.gov/pdfs/w_c/hdms/Plants/Cimiariz.fo.pdf
- http://www.azgfd.gov/w_c/edits/images/cimiariz.gif

Arizona Frog Orchid
- http://www.azgfd.gov/w_c/edits/documents/Coelvivi.d.pdf
- http://www.azgfd.gov/w_c/edits/images/coelvivi.gif

Mexican Spotted Owl
- http://www.azgfd.gov/w_c/edits/documents/Strioclu.fi.pdf
- http://www.azgfd.gov/w_c/edits/images/strioclu.gif

Hammond's Flycatcher
- http://www.azgfd.gov/w_c/edits/documents/Empihamm.d.pdf
- http://www.bird-friends.com/BirdPage.php?name=Hammond's%20Flycatcher

PINE FOREST

Western Fairy Slipper
- http://www.azgfd.gov/w_c/edits/documents/Calybulb.d.pdf
- http://www.azgfd.gov/w_c/edits/images/calybulb.gif

Nevin Bird's-beak
- http://www.azgfd.gov/w_c/edits/documents/Cordnevi.d.pdf
- http://www.azgfd.gov/w_c/edits/images/cordnevi.gif

Long-eared Myotis
- http://www.azgfd.gov/w_c/edits/documents/Myotevot.fi.pdf
- http://www.azgfd.gov/w_c/edits/images/myotevot.gif

Mexican Gray Wolf
- http://www.azgfd.gov/w_c/edits/documents/Caniluba.d.pdf
- http://www.phoenixzoo.org/zoo/animals/facts/mexicanwolf.asp

PINYON-JUNIPER

Huachuca Milk-vetch
- http://www.azgfd.gov/pdfs/w_c/hdms/Plants/Astrhypo.fo.pdf
- http://www.azgfd.gov/w_c/edits/images/astrhypo.gif

Roaring Springs Prickly-poppy
- http://www.azgfd.gov/w_c/edits/documents/Argeariz.fi.pdf
- http://www.azgfd.gov/w_c/edits/images/argeariz.gif

Arizona Night Lizard
- http://www.azgfd.gov/w_c/edits/documents/Xantariz.d_000.pdf
- http://www.azgfd.gov/w_c/edits/images/xantariz.gif

Narrow-headed Garter Snake
- http://www.azgfd.gov/w_c/edits/documents/Thamrufi.di_001.pdf
- http://www.azgfd.gov/w_c/edits/images/thamrufi_000.gif

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OAK-PINE

Chihuahuan Stickseed

- http://www.azgfd.gov/pdfs/w_c/hdms/Plants/Hackursi.fo.pdf
- http://www.azgfd.gov/w_c/edits/images/hackursi.gif

Woodland Spurge

- http://www.azgfd.gov/w_c/edits/documents/Euphmacr.d.pdf
- http://www.azgfd.gov/w_c/edits/images/euphmacr.gif

Berylline Hummingbird

- http://www.azgfd.gov/w_c/edits/documents/Amazbery.D.pdf
- http://www.azgfd.gov/w_c/edits/images/amazbery.gif

Elegant Trogon

- http://www.azgfd.gov/w_c/edits/documents/Trogeleg.d.pdf
- http://www.azgfd.gov/w_c/edits/images/trogeleg.gif

OAK WOODLAND

Large-flowered Blue Star

- http://www.azgfd.gov/w_c/edits/documents/Amsogran.fo.pdf
- http://www.azgfd.gov/w_c/edits/images/amsogran.gif

Chiltepin

- http://www.azgfd.gov/w_c/edits/documents/Capsangl.fo.pdf
- http://www.azgfd.gov/w_c/edits/images/capsangl.gif

Yellow-nosed Cotton Rat

- http://www.azgfd.gov/w_c/edits/documents/Sigmochr.di.pdf
- http://www.azgfd.gov/w_c/edits/images/sigmochr.gif

Acorn Woodpecker

- http://www.birding.com/572aw.asp
- http://www.bird-friends.com/BirdPage.php?name=Acorn%20Woodpecker

CHAPARRAL

Flannel Bush

- http://www.azgfd.gov/w_c/edits/documents/Fremcali.d.pdf
- http://www.azgfd.gov/w_c/edits/images/fremcali.gif

Arizona Agave

- http://www.azgfd.gov/w_c/edits/documents/Agavariz.fo.pdf
- http://www.azgfd.gov/w_c/edits/images/agavariz.gif

Madrean Alligator Lizard

- http://www.reptilesofaz.com/Lizards-Subpages/h-e-kingii.html
- http://www.anapsid.org/gerrhont.html

Coyote

- http://www.azgfd.gov/h_f/game_coyote.shtml
- http://www.phoenixzoo.org/zoo/animals/facts/coyote.asp

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MOUNTAIN GRASSLAND

Kaibab Beardtongue

- http://www.azgfd.gov/w_c/edits/documents/Penspseu.fi.pdf
- http://www.azgfd.gov/w_c/edits/images/penspseu.gif

Redflower Onion

- http://www.azgfd.gov/w_c/edits/documents/Allirhiz.d.pdf
- http://www.azgfd.gov/w_c/edits/images/allirhiz.gif

White Mountains Ground Squirrel

- http://www.azgfd.gov/w_c/edits/documents/Spertrmo.d.pdf
- http://www.azgfd.gov/w_c/edits/images/spertrmo.gif

New Mexican Jumping Mouse

- http://www.azgfd.gov/w_c/edits/documents/Zapuhulu.d.pdf
- http://www.azgfd.gov/w_c/edits/images/zapuhulu_000.gif

PLAINS GRASSLAND

Paper-spined Cactus

- http://www.azgfd.gov/w_c/edits/documents/Pedipapy.d_000.pdf
- http://www.azgfd.gov/w_c/edits/images/pedipapy_000.gif

Peebles Blue Star

- http://www.azgfd.gov/w_c/edits/documents/Amsopeeb.d.pdf
- http://www.azgfd.gov/w_c/edits/images/amsopeeb.gif

Black-tailed Prairie Dog

- http://www.azgfd.gov/w_c/edits/documents/Cynoludo.fi.pdf
- http://www.desertusa.com/dec96/du_pdogs.html

Milksnake

- http://www.azgfd.gov/w_c/edits/documents/Lamptria.d_001.pdf
- http://www.azgfd.gov/w_c/edits/images/lamptria_000.gif

DESERT GRASSLAND

Pima Indian Mallow

- http://www.azgfd.gov/pdfs/w_c/hdms/Plants/Abutpari.fo.pdf
- http://www.azgfd.gov/w_c/edits/images/abutpari.gif

Arid Throne Fleabane

- http://www.azgfd.gov/pdfs/w_c/hdms/Plants/Erigaris.fo.pdf
- http://www.azgfd.gov/w_c/edits/images/erigaris.gif

Mexican Hog-nosed Snake

- http://www.azgfd.gov/w_c/edits/documents/Hetenake.d_001.pdf
- http://www.azgfd.gov/w_c/edits/images/hetenake_000.gif

Masked Bobwhite

- http://www.azgfd.gov/w_c/edits/documents/Coliviri.d.pdf
- http://www.azgfd.gov/w_c/edits/images/coliviri.gif

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GREAT BASIN DESERT

Fredonia Catseye

- http://www.azgfd.gov/w_c/edits/documents/Crypsemi.d_000.pdf
- http://www.azgfd.gov/w_c/edits/images/crypsemi_000.gif

Whiting Dalia

- http://www.azgfd.gov/w_c/edits/documents/PSORTHWH.fi_000.pdf
- http://www.azgfd.gov/w_c/edits/images/psorthwh_000.gif

New Mexico Banner-tailed Kangaroo Rat

- http://www.azgfd.gov/w_c/edits/documents/Dipospba.d.pdf
- http://www.desertusa.com/aug96/du_krat.html

Pygmy Rabbit

- http://www.azgfd.gov/w_c/edits/documents/Sylvidah.d.pdf
- http://www.glenoakzoo.org/pygmy_rabbit_fact.htm

MOHAVE DESERT

Grand Canyon Flaveria

- http://www.azgfd.gov/w_c/edits/documents/Flavmcdo.d.pdf
- http://www.azgfd.gov/w_c/edits/images/flavmcdo.gif

Brittlebush

- http://www.desertusa.com/april96/du_britbush.html
- http://www.fs.fed.us/database/feis/plants/shrub/encfar/all.html

Kit Fox

- http://www.azgfd.gov/h_f/game_foxes.shtml
- http://www.southwestwildlife.org/factsheets/kitfox.htm

Desert Iguana

- http://www.desertusa.com/april97/du_desiguana.html
- http://www.desertmuseum.org/books/nhsd_desert_iguana.html

SONORAN DESERT

Crucifixion Thorn

- http://www.azgfd.gov/w_c/edits/documents/Castemor.d.pdf
- http://www.desertusa.com/magdec97/dec_pap/du_cruxthorn.html

Gander's Cryptantha

- http://www.azgfd.gov/w_c/edits/documents/Crypgand.d.pdf
- http://www.azgfd.gov/w_c/edits/images/crypgand.gif

Crested Caracara

- http://www.azgfd.gov/w_c/edits/documents/Caracher.d.pdf
- http://www.azgfd.gov/w_c/edits/images/caracher.gif

Gila Monster

- http://www.azgfd.gov/w_c/edits/documents/Helosuci.d_001.pdf
- http://www.azgfd.gov/w_c/edits/images/helosuci_000.gif

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CHIHUAHUAN DESERT

Cob Corycactus

- http://www.azgfd.gov/w_c/edits/documents/Escotube.d.pdf
- http://www.azgfd.gov/w_c/edits/images/escotube.gif

Lechuguilla

- http://www.fs.fed.us/database/feis/plants/shrub/agalec/all.html
- http://www.explorenm.com/plants/Agavaceae/Agave/lechuguilla/

Greater Roadrunner

- http://www.phoenixzoo.org/zoo/animals/facts/roadrunner.asp
- http://www.desertmuseum.org/books/nhsd_roadrunner_new.html

Black-capped Gnatcatcher

- http://www.azgfd.gov/w_c/edits/documents/Polinigr.d.pdf
- http://www.azgfd.gov/w_c/edits/images/polinigr.gif

Appendix D: Worksheets and Overheads

The pages that follow contain the worksheets listed below:

A. *Student Assignment Cards* – Cards with basic information about additional plants and animals that can be given to each student as they begin their research (7 pages)

B. *"Life in a Biome"* Newsletter/Scoring Rubric – A double-sided handout to introduce the narrative essay to the students (2 pages)

C. *Author Self-Reflection* – One method students can use to reflect on their own writing before turning in the final draft (1 page)

D. *Peer Editing Guide* – A tool to guide students through the peer editing process (1 page)

Student Assignment Cards

Cut out each of the cards below and give one to each student assigned to this biotic community. Cards are already arranged by the biotic community.

A Day in the Life… **Organism Card** General information about the plant or animal you have been assigned: Common Name – Arizona Bugbane Scientific Name – *Cimicifuga arizonica* Primary Biotic Community – Fir Forest Websites to get you started: http://www.azgfd.gov/pdfs/w_c/hdms/Plants/Cimiariz.fo.pdf http://www.azgfd.gov/w_c/edits/images/cimiariz.gif	**A Day in the Life…** **Organism Card** General information about the plant or animal you have been assigned: Common Name – Arizona Frog Orchid Scientific Name – *Coeloglossum viride* var. *virescens* Primary Biotic Community – Fir Forest Websites to get you started: http://www.azgfd.gov/w_c/edits/documents/Coelvivi.d.pdf http://www.azgfd.gov/w_c/edits/images/coelvivi.gif
A Day in the Life… **Organism Card** General information about the plant or animal you have been assigned: Common Name – Mexican Spotted Owl Scientific Name – *Strix occidentalis lucida* Primary Biotic Community – Fir Forest Websites to get you started: http://www.azgfd.gov/w_c/edits/documents/Strioclu.fi.pdf http://www.azgfd.gov/w_c/edits/images/strioclu.gif	**A Day in the Life…** **Organism Card** General information about the plant or animal you have been assigned: Common Name – Hammond's Flycatcher Scientific Name – *Empidonax hammondii* Primary Biotic Community – Fir Forest Websites to get you started: http://www.azgfd.gov/w_c/edits/documents/Empihamm.d.pdf http://www.bird-friends.com/BirdPage.php?name=Hammond's%20Flycatcher

A Day in the Life…
Organism Card

General information about the plant or animal you have been assigned:

Common Name – Western Fairy Slipper
Scientific Name – *Calypso bulbosa*
Primary Biotic Community – Pine Forest

Websites to get you started:
http://www.azgfd.gov/w_c/edits/documents/Calybulb.d.pdf
http://www.azgfd.gov/w_c/edits/images/calybulb.gif

A Day in the Life…
Organism Card

General information about the plant or animal you have been assigned:

Common Name – Nevin Bird's-beak
Scientific Name – *Cordylanthus nevinii*
Primary Biotic Community – Pine Forest

Websites to get you started:
http://www.azgfd.gov/w_c/edits/documents/Cordnevi.d.pdf
http://www.azgfd.gov/w_c/edits/images/cordnevi.gif

A Day in the Life…
Organism Card

General information about the plant or animal you have been assigned:

Common Name – Long-eared Myotis
Scientific Name – *Myotis evotis*
Primary Biotic Community – Pine Forest

Websites to get you started:
http://www.azgfd.gov/w_c/edits/documents/Myotevot.fi.pdf
http://www.azgfd.gov/w_c/edits/images/myotevot.gif

A Day in the Life…
Organism Card

General information about the plant or animal you have been assigned:

Common Name – Mexican Gray Wolf
Scientific Name – *Canis lupus baileyi*
Primary Biotic Community – Pine Forest

Websites to get you started:
http://www.azgfd.gov/w_c/edits/documents/Caniluba.d.pdf
http://www.phoenixzoo.org/zoo/animals/facts/mexicanwolf.asp

A Day in the Life…
Organism Card

General information about the plant or animal you have been assigned:

Common Name – Huachuca Milk-vetch
Scientific Name – *Astragalus hypoxylus*
Primary Biotic Community – Pinyon-Juniper

Websites to get you started:
http://www.azgfd.gov/pdfs/w_c/hdms/Plants/Astrhypo.fo.pdf
http://www.azgfd.gov/w_c/edits/images/astrhypo.gif

A Day in the Life…
Organism Card

General information about the plant or animal you have been assigned:

Common Name – Roaring Springs Prickly-poppy
Scientific Name – *Argemone arizonica*
Primary Biotic Community – Pinyon-Juniper

Websites to get you started:
http://www.azgfd.gov/w_c/edits/documents/Argeariz.fi.pdf
http://www.azgfd.gov/w_c/edits/images/argeariz.gif

A Day in the Life…
Organism Card

General information about the plant or animal you have been assigned:

Common Name – Arizona Night Lizard
Scientific Name – *Xantusia arizonae*
Primary Biotic Community – Pinyon-Juniper

Websites to get you started:
http://www.azgfd.gov/w_c/edits/documents/Xantariz.d_000.pdf
http://www.azgfd.gov/w_c/edits/images/xantariz.gif

A Day in the Life…
Organism Card

General information about the plant or animal you have been assigned:

Common Name – Narrow-headed Garter Snake
Scientific Name – *Thamnophis rufipunctatus*
Primary Biotic Community – Pinyon-Juniper

Websites to get you started:
http://www.azgfd.gov/w_c/edits/documents/Thamrufi.di_001.pdf
http://www.azgfd.gov/w_c/edits/images/thamrufi_000.gif

A Day in the Life…
Organism Card

General information about the plant or animal you have been assigned:

Common Name – Chihuahuan Stickseed
Scientific Name – *Hackelia ursina*
Primary Biotic Community – Oak-Pine

Websites to get you started:
http://www.azgfd.gov/pdfs/w_c/hdms/Plants/Hackursi.fo.pdf
http://www.azgfd.gov/w_c/edits/images/hackursi.gif

A Day in the Life…
Organism Card

General information about the plant or animal you have been assigned:

Common Name – Woodland Spurge
Scientific Name – *Euphorbia macropus*
Primary Biotic Community – Oak-Pine

Websites to get you started:
http://www.azgfd.gov/w_c/edits/documents/Euphmacr.d.pdf
http://www.azgfd.gov/w_c/edits/images/euphmacr.gif

A Day in the Life…
Organism Card

General information about the plant or animal you have been assigned:

Common Name – Berylline Hummingbird
Scientific Name – *Amazilia beryllina*
Primary Biotic Community – Oak-Pine

Websites to get you started:
http://www.azgfd.gov/w_c/edits/documents/Amazbery.D.pdf
http://www.azgfd.gov/w_c/edits/images/amazbery.gif

A Day in the Life…
Organism Card

General information about the plant or animal you have been assigned:

Common Name – Elegant Trogon
Scientific Name – *Trogon elegans*
Primary Biotic Community – Oak-Pine

Websites to get you started:
http://www.azgfd.gov/w_c/edits/documents/Trogeleg.d.pdf
http://www.azgfd.gov/w_c/edits/images/trogeleg.gif

A Day in the Life…
Organism Card

General information about the plant or animal you have been assigned:

Common Name – Large-flowered Blue Star
Scientific Name – *Amsonia grandiflora*
Primary Biotic Community – Oak Woodland

Websites to get you started:
http://www.azgfd.gov/w_c/edits/documents/Amsogran.fo.pdf
http://www.azgfd.gov/w_c/edits/images/amsogran.gif

A Day in the Life…
Organism Card

General information about the plant or animal you have been assigned:

Common Name – Chiltepin
Scientific Name – *Capsicum annuum* var. *glabriusculum*
Primary Biotic Community – Oak Woodland

Websites to get you started:
http://www.azgfd.gov/w_c/edits/documents/Capsangl.fo.pdf
http://www.azgfd.gov/w_c/edits/images/capsangl.gif

A Day in the Life…
Organism Card

General information about the plant or animal you have been assigned:

Common Name – Yellow-nosed Cotton Rat
Scientific Name – *Sigmodon ochrognathus*
Primary Biotic Community – Oak Woodland

Websites to get you started:
http://www.azgfd.gov/w_c/edits/documents/Sigmochr.di.pdf
http://www.azgfd.gov/w_c/edits/images/sigmochr.gif

A Day in the Life…
Organism Card

General information about the plant or animal you have been assigned:

Common Name – Acorn Woodpecker
Scientific Name – *Melanerpes formicivorus*
Primary Biotic Community – Oak Woodland

Websites to get you started:
http://www.birding.com/572aw.asp
http://www.bird-friends.com/BirdPage.php?name=Acorn%20Woodpecker

A Day in the Life…
Organism Card

General information about the plant or animal you have been assigned:

Common Name – Flannel Bush
Scientific Name – *Fremontodendron californicum*
Primary Biotic Community – Chaparral

Websites to get you started:
http://www.azgfd.gov/w_c/edits/documents/Fremcali.d.pdf
http://www.azgfd.gov/w_c/edits/images/fremcali.gif

A Day in the Life…
Organism Card

General information about the plant or animal you have been assigned:

Common Name – Arizona Agave
Scientific Name – *Agave arizonica*
Primary Biotic Community – Chaparral

Websites to get you started:
http://www.azgfd.gov/w_c/edits/documents/Agavariz.fo.pdf
http://www.azgfd.gov/w_c/edits/images/agavariz.gif

A Day in the Life…
Organism Card

General information about the plant or animal you have been assigned:

Common Name – Madrean Alligator Lizard
Scientific Name – *Elgaria kingii*
Primary Biotic Community – Chaparral

Websites to get you started:
http://www.reptilesofaz.com/Lizards-Subpages/h-e-kingii.html
http://www.anapsid.org/gerrhont.html

A Day in the Life…
Organism Card

General information about the plant or animal you have been assigned:

Common Name – Coyote
Scientific Name – *Canis latrans*
Primary Biotic Community – Chaparral

Websites to get you started:
http://www.azgfd.gov/h_f/game_coyote.shtml
http://www.phoenixzoo.org/zoo/animals/facts/coyote.asp

A Day in the Life…
Organism Card

General information about the plant or animal you have been assigned:

Common Name – Kaibab Beardtongue
Scientific Name – *Penstemon pseudoputus*
Primary Biotic Community – Mountain Grassland

Websites to get you started:
http://www.azgfd.gov/w_c/edits/documents/Penspseu.fi.pdf
http://www.azgfd.gov/w_c/edits/images/penspseu.gif

A Day in the Life…
Organism Card

General information about the plant or animal you have been assigned:

Common Name – Redflower Onion
Scientific Name – *Allium rhizomatum*
Primary Biotic Community – Mountain Grassland

Websites to get you started:
http://www.azgfd.gov/w_c/edits/documents/Allirhiz.d.pdf
http://www.azgfd.gov/w_c/edits/images/allirhiz.gif

A Day in the Life…
Organism Card

General information about the plant or animal you have been assigned:

Common Name – White Mountains Ground Squirrel
Scientific Name – *Spermophilus tridecemlineatus monticola*
Primary Biotic Community – Mountain Grassland

Websites to get you started:
http://www.azgfd.gov/w_c/edits/documents/Spertrmo.d.pdf
http://www.azgfd.gov/w_c/edits/images/spertrmo.gif

A Day in the Life…
Organism Card

General information about the plant or animal you have been assigned:

Common Name – New Mexican Jumping Mouse
Scientific Name – *Zapus hudsonius luteus*
Primary Biotic Community – Mountain Grassland

Websites to get you started:
http://www.azgfd.gov/w_c/edits/documents/Zapuhulu.d.pdf
http://www.azgfd.gov/w_c/edits/images/zapuhulu_000.gif

A Day in the Life…
Organism Card

General information about the plant or animal you have been assigned:

Common Name – Paper-spined Cactus
Scientific Name – *Pediocactus papyracanthus*
Primary Biotic Community – Plains Grassland

Websites to get you started:
http://www.azgfd.gov/w_c/edits/documents/Pedipapy.d_000.pdf
http://www.azgfd.gov/w_c/edits/images/pedipapy_000.gif

A Day in the Life…
Organism Card

General information about the plant or animal you have been assigned:

Common Name – Peebles Blue Star
Scientific Name – *Amsonia peeblesii*
Primary Biotic Community – Plains Grassland

Websites to get you started:
http://www.azgfd.gov/w_c/edits/documents/Amsopeeb.d.pdf
http://www.azgfd.gov/w_c/edits/images/amsopeeb.gif

A Day in the Life…
Organism Card

General information about the plant or animal you have been assigned:

Common Name – Black-tailed Prairie Dog
Scientific Name – *Cynomys ludovicianus*
Primary Biotic Community – Plains Grassland

Websites to get you started:
http://www.azgfd.gov/w_c/edits/documents/Cynoludo.fi.pdf
http://www.desertusa.com/dec96/du_pdogs.html

A Day in the Life…
Organism Card

General information about the plant or animal you have been assigned:

Common Name – Milksnake
Scientific Name – *Lampropeltis triangulum*
Primary Biotic Community – Plains Grassland

Websites to get you started:
http://www.azgfd.gov/w_c/edits/documents/Lamptria.d_001.pdf
http://www.azgfd.gov/w_c/edits/images/lamptria_000.gif

A Day in the Life…
Organism Card

General information about the plant or animal you have been assigned:

Common Name – Pima Indian Mallow
Scientific Name – *Abutilon parishii*
Primary Biotic Community – Desert Grassland

Websites to get you started:
http://www.azgfd.gov/pdfs/w_c/hdms/Plants/Abutpari.fo.pdf
http://www.azgfd.gov/w_c/edits/images/abutpari.gif

A Day in the Life…
Organism Card

General information about the plant or animal you have been assigned:

Common Name – Arid Throne Fleabane
Scientific Name – *Erigeron arisolius*
Primary Biotic Community – Desert Grassland

Websites to get you started:
http://www.azgfd.gov/pdfs/w_c/hdms/Plants/Erigaris.fo.pdf
http://www.azgfd.gov/w_c/edits/images/erigaris.gif

A Day in the Life…
Organism Card

General information about the plant or animal you have been assigned:

Common Name – Mexican Hog-nosed Snake
Scientific Name – *Heterodon nasicus kennerlyi*
Primary Biotic Community – Desert Grassland

Websites to get you started:
http://www.azgfd.gov/w_c/edits/documents/Hetenake.d_001.pdf
http://www.azgfd.gov/w_c/edits/images/hetenake_000.gif

A Day in the Life…
Organism Card

General information about the plant or animal you have been assigned:

Common Name – Masked Bobwhite
Scientific Name – *Colinus virginianus ridgwayi*
Primary Biotic Community – Desert Grassland

Websites to get you started:
http://www.azgfd.gov/w_c/edits/documents/Coliviri.d.pdf
http://www.azgfd.gov/w_c/edits/images/coliviri.gif

A Day in the Life…
Organism Card

General information about the plant or animal you have been assigned:

Common Name – Fredonia Catseye
Scientific Name – *Cryptantha semiglabra*
Primary Biotic Community – Great Basin Desert

Websites to get you started:
http://www.azgfd.gov/w_c/edits/documents/Crypsemi.d_000.pdf
http://www.azgfd.gov/w_c/edits/images/crypsemi_000.gif

A Day in the Life…
Organism Card

General information about the plant or animal you have been assigned:

Common Name – Whiting Dalia
Scientific Name – *Psorothamnus thompsonae* var. *whitingii*
Primary Biotic Community – Great Basin Desert

Websites to get you started:
http://www.azgfd.gov/w_c/edits/documents/PSORTHWH.fi_000.pdf
http://www.azgfd.gov/w_c/edits/images/psorthwh_000.gif

A Day in the Life…
Organism Card

General information about the plant or animal you have been assigned:

Common Name – New Mexico Banner-tailed Kangaroo Rat
Scientific Name – *Dipodomys spectabilis baileyi*
Primary Biotic Community – Great Basin Desert

Websites to get you started:
http://www.azgfd.gov/w_c/edits/documents/Dipospba.d.pdf
http://www.desertusa.com/aug96/du_krat.html

A Day in the Life…
Organism Card

General information about the plant or animal you have been assigned:

Common Name – Pygmy Rabbit
Scientific Name – *Sylvilagus idahoensis*
Primary Biotic Community – Great Basin Desert

Websites to get you started:
http://www.azgfd.gov/w_c/edits/documents/Sylvidah.d.pdf
http://www.glenoakzoo.org/pygmy_rabbit_fact.htm

A Day in the Life…
Organism Card

General information about the plant or animal you have been assigned:

Common Name – Grand Canyon Flaveria
Scientific Name – *Flaveria mcdougallii*
Primary Biotic Community – Mohave Desert

Websites to get you started:
http://www.azgfd.gov/w_c/edits/documents/Flavmcdo.d.pdf
http://www.azgfd.gov/w_c/edits/images/flavmcdo.gif

A Day in the Life…
Organism Card

General information about the plant or animal you have been assigned:

Common Name – Brittlebush
Scientific Name – *Encelia farinosa*
Primary Biotic Community – Mohave Desert

Websites to get you started:
http://www.desertusa.com/april96/du_britbush.html
http://www.fs.fed.us/database/feis/plants/shrub/encfar/all.html

A Day in the Life…
Organism Card

General information about the plant or animal you have been assigned:

Common Name – Kit Fox
Scientific Name – *Vulpes macrotis*
Primary Biotic Community – Mohave Desert

Websites to get you started:
http://www.azgfd.gov/h_f/game_foxes.shtml
http://www.southwestwildlife.org/factsheets/kitfox.htm

A Day in the Life…
Organism Card

General information about the plant or animal you have been assigned:

Common Name – Desert Iguana
Scientific Name – *Dispsosaurus dorsalis*
Primary Biotic Community – Mohave Desert

Websites to get you started:
http://www.desertusa.com/april97/du_desiguana.html
http://www.desertmuseum.org/books/nhsd_desert_iguana.html

A Day in the Life…
Organism Card

General information about the plant or animal you have been assigned:

Common Name – Crucifixion Thorn
Scientific Name – *Castela emoryi*
Primary Biotic Community – Sonoran Desert

Websites to get you started:
http://www.azgfd.gov/w_c/edits/documents/Castemor.d.pdf
http://www.desertusa.com/magdec97/dec_pap/du_cruxthorn.html

A Day in the Life…
Organism Card

General information about the plant or animal you have been assigned:

Common Name – Gander's Cryptantha
Scientific Name – *Cryptantha ganderi*
Primary Biotic Community – Sonoran Desert

Websites to get you started:
http://www.azgfd.gov/w_c/edits/documents/Crypgand.d.pdf
http://www.azgfd.gov/w_c/edits/images/crypgand.gif

A Day in the Life…
Organism Card

General information about the plant or animal you have been assigned:

Common Name – Crested Caracara
Scientific Name – *Caracara cheriway*
Primary Biotic Community – Sonoran Desert

Websites to get you started:
http://www.azgfd.gov/w_c/edits/documents/Caracher.d.pdf
http://www.azgfd.gov/w_c/edits/images/caracher.gif

A Day in the Life…
Organism Card

General information about the plant or animal you have been assigned:

Common Name – Gila Monster
Scientific Name – *Heloderma suspectum cinctum*
Primary Biotic Community – Sonoran Desert

Websites to get you started:
http://www.azgfd.gov/w_c/edits/documents/Helosuci.d_001.pdf
http://www.azgfd.gov/w_c/edits/images/helosuci_000.gif

A Day in the Life…
Organism Card

General information about the plant or animal you have been assigned:

Common Name – Cob Corycactus
Scientific Name – *Escobaria tuberculosa*
Primary Biotic Community – Chihuahuan Desert

Websites to get you started:
http://www.azgfd.gov/w_c/edits/documents/Escotube.d.pdf
http://www.azgfd.gov/w_c/edits/images/escotube.gif

A Day in the Life…
Organism Card

General information about the plant or animal you have been assigned:

Common Name – Lechuguilla
Scientific Name – *Agave lechuguilla*
Primary Biotic Community – Chihuahuan Desert

Websites to get you started:
http://www.fs.fed.us/database/feis/plants/shrub/agalec/all.html
http://www.explorenm.com/plants/Agavaceae/Agave/lechuguilla/

A Day in the Life…
Organism Card

General information about the plant or animal you have been assigned:

Common Name – Greater Roadrunner
Scientific Name – *Geococcyx californiana*
Primary Biotic Community – Chihuahuan Desert

Websites to get you started:
http://www.phoenixzoo.org/zoo/animals/facts/roadrunner.asp
http://www.desertmuseum.org/books/nhsd_roadrunner_new.html

A Day in the Life…
Organism Card

General information about the plant or animal you have been assigned:

Common Name – Black-capped Gnatcatcher
Scientific Name – *Polioptila nigriceps*
Primary Biotic Community – Chihuahuan Desert

Websites to get you started:
http://www.azgfd.gov/w_c/edits/documents/Polinigr.d.pdf
http://www.azgfd.gov/w_c/edits/images/polinigr.gif

Volume 1, Issue 1

Arizona Community Bulletin

A publication of the Arizona Game and Fish Department

Life in a Biome: Students Transformed!

Yikes! You wake up one morning to discover that you are no longer in your comfy bed at home. Instead, a completely new environment surrounds you. Looking around carefully, you begin to recognize some of the plants and animals around you and realize that this is one of the biotic communities you've been studying at school!

Satisfied that you know where you are, you notice that you are no longer human! You examine yourself carefully and realize that you are a _____.

What a great opportunity to really understand life in this biotic community. You decide to keep a record of everything you observe in your day so that you can write up a report.

Boy, will your teacher be impressed!

A Day in the Life ...

Include information about:

- Climate
- Topography
- Descriptions of animals and plants around you
- Interactions with other life forms in the community
- What you ate (or what ate you!)

Scoring Rubric on Reverse

Refer to the rubric on the back to ensure that you have met all the requirements for this assignment. Enjoy your "Day!"

6 + 1 Trait Writing Model

CATEGORY	4	3	2	1
Accuracy of Facts (Content)	All supportive facts are reported accurately.	Almost all supportive facts are reported accurately.	Most supportive facts are reported accurately.	NO facts are reported OR most are inaccurately reported.
Adding Personality (Voice)	The writer has developed a unique and appropriate plant or animal voice. There is a strong sense of personality.	The writer has developed an appropriate plant or animal voice. There is some sense of personality, but it may be inconsistent or weak at times.	The writer occasionally develops an appropriate voice, but generally it is weak and inconsistent.	There is no sense of voice in the essay.
Sequencing (Organization)	Details are placed in a logical order and the way they are presented effectively keeps the interest of the reader.	Details are placed in a logical order, but the way in which they are presented/ introduced sometimes makes the writing less interesting.	Some details are not in a logical or expected order, and may distract or confuse the reader.	Many details are not in a logical or expected order. There is little sense that the writing is organized.
Word Choice	Writer uses vivid words and phrases that linger or draw pictures in the reader's mind, and the choice and placement of the words seems accurate, natural, and not forced.	Writer uses vivid words and phrases that linger or draw pictures in the reader's mind, but occasionally the words are used inaccurately or seem overdone.	Writer uses words that communicate clearly, but the writing lacks variety, punch, or flair.	Writer uses a limited vocabulary that does not communicate strongly or capture the reader's interest. Jargon or clichés may be present and detract from the meaning.
Flow & Rhythm (Sentence Fluency)	All sentences sound natural and are easy-on-the-ear when read aloud. Each sentence is clear and has an obvious emphasis.	Almost all sentences sound natural and are easy-on-the-ear when read aloud, but 1 or 2 are stiff, awkward or difficult to understand.	Most sentences sound natural and are easy-on-the-ear when read aloud, but several are stiff, awkward or difficult to understand.	The sentences are difficult to read aloud because they sound awkward, are distractingly repetitive, or difficult to understand.
Completeness	Required elements (climate, terrain, other plants and animals, encounters, and food) are addressed completely.	Required elements (climate, terrain, other plants and animals, encounters, and food) are included, but may only be given superficial treatment.	Some required elements (climate, terrain, other plants and animals, encounters, and food) are missing and/or not described in enough detail.	Many required elements (climate, terrain, other plants and animals, encounters, and food) are missing and/or are incomplete in detail.
Bibliography	Works consulted in researching the topic are listed correctly and in sufficient number. Web sources have been evaluated for reliability and lack of bias.	Although works listed may be sufficient in number, some are not properly formatted. Web sources appear to be reliable and unbiased.	Works listed may be insufficient in number or have some serious errors in formatting. Web sources have questionable reliability.	Most works consulted in researching the topic are listed incorrectly and too few sources are listed. Unreliable web sources are used.

Author Self-Reflection

Author: _____

Title: _____

Please think back about the process of researching and writing this paper and respond to the following prompts:

1. What do you like best about your paper? Be specific!

2. Was researching and writing it easy or hard? Explain how/why.

3. What concerns do you have about this paper? What do you want your editors to focus on? (sentence errors, spelling, details, organization?)

Peer Editing Sheet

Editors:

1. _____
2. _____
3. _____

Please read this paper carefully and respond to the following prompts on another sheet of paper. Remember you are not to make changes or corrections on anyone else's paper, but you may suggest them:

Editor #1:

a. Has the author described the terrain, climate, and other animals and plants in sufficient, entertaining detail? Underline (or highlight) words and sentences that do an especially good job of description.
b. Write a sentence describing what you like about the essay.
c. Question the author about any area that is not clear to you.
d. What can the author do to improve this paper? Be specific!
e. Please respond directly to the author's stated concerns.

Editor #2:

a. Has the author described a typical "day in the life"? Underline actions that are characteristic of the plant or animal.
b. Write a sentence describing what you like about the essay.
c. Question the author about any area that is not clear to you.
d. What can the author do to improve this paper? Be specific!
e. Please respond directly to the author's stated concerns.

Editor #3:

a. Does the author use a *voice* that is appropriate and effective for his/her plant or animal? Underline words that reveal the author's unique voice.
b. Write a sentence describing what you like about the essay.
c. Question the author about any area that is not clear to you.
d. What can the author do to improve this paper? Be specific!
e. Please respond directly to the author's stated concerns.