



Who Dung-it?

A forty-five or ninety minute Discovery Class program

To the Teacher:

Thank you for making the “*Who Dung-it?*” Desert Discovery Class a part of your curriculum. During this exciting educational program, students will see live desert animals, handle many different types of artifacts, and work with classmates to draw conclusions based on the clues presented in the program.

This packet contains pre- and post- program information and activities along with a vocabulary list and suggested resources. These materials were developed to help you extend this class topic with both introductory and follow-up lessons. The pre-visit information will introduce students to some of the basic concepts presented in the *Who Dung-it*, and help prepare them for the class. We hope you’ll find this information useful and easy to incorporate into your science curriculum. For more information about the Desert Museum and the Sonoran Desert, visit our website at www.desertmuseum.org.

Sincerely,
ASDM Department of Conservation Education and Science

Who Dung-it?

Although it may be difficult to see some desert animals, they do leave many clues behind. The challenge is to figure out who left those clues. Students will become detectives to help solve the mystery of just who "dung it" in the desert. Students will identify and learn about various desert species through hands-on discoveries and live animal presentations.

Class objectives:

Through the examination of hands-on artifacts, live animals, and cooperative team work students will:

- Identify 3-6 Sonoran Desert animals by the signs they leave behind
- List 3-6 different categories of animal signs
- Infer behavior and or characteristics of specific animals by their signs
- Draw conclusions based on the comparison of animal signs and explain their reasoning.
- Define specific terms such as carnivore, herbivore, omnivore, incisor, molar and scat.

ARIZONA ACADEMIC STANDARDS IN SCIENCE CORRELATION

The “Who Dung-it?” program and supplemental activities correlate to these Arizona Academic Science Standards. See each activity for specific standards and performance objectives.

Science Standards:

Strand 1. Inquiry Process

- Concept 1: Observations, Questions, and Hypotheses
- Concept 2: Scientific Testing (Investigating and Modeling)
- Concept 3: Analysis and Conclusions
- Concept 4: Communication

Strand 2: History and Nature of Science

- Concept 2: Nature of Scientific Knowledge

Strand 4: Life Science

- Concept 1: Characteristics of Organisms
- Concept 3: Organisms and Environments
- Concept 4: Diversity, Adaptation and Behavior

Activity Books – Activity Guides - Magazines

- Braus, J., ed. Ranger Rick’s NatureScope: *Discovering Deserts!* Washington D.C.: National Wildlife Federation, McGraw-Hill Companies, 1985. (For ordering information call: 1-800-722-4726)
- Braus, J., ed. Ranger Rick’s NatureScope: *Endangered Species.* Washington D.C.: National Wildlife Federation, McGraw-Hill Companies, 1987.
- National Science Teachers Association. *Science and Children.* 1840 Wilson Blvd. Arlington, Virginia 22201-3000.
- *OBIS.* 12 Simon Street. Nashua, New Hampshire. Delta Education.

Books for Students

Buxton, Jame H. *Creatures of the Desert World.* Los Angeles: Intervisual Communications, Inc., 1987.

Gibbons, Gail. *Deserts.* New York: Holiday House, 1996.

Lynch, Wayne. *The Scoop on Poop.* New York: Fifth House Books 2001

McCarthy, C. *Eyewitness Books: Desert.* New York: Alfred A. Knopf, 1991. (Many other books in the *Eyewitness* series contain information on desert species.)

Robson, Gary D. *Who Pooped in the Sonoran Desert: Scat and Tracks for Kids.* Helena: FarCountry Press 2006

Silver, Donald M. *One Small Square: Cactus Desert.* New York: Learning Triangle Press 1995

Wallace, Marianne D. *America’s Deserts: Guide to Plants and Animals.* Colorado: Fulcrum Publishing 1996

Web sites/Organizations

- Arizona-Sonora Desert Museum: <http://desertmuseum.org/kids/oz/long-fact-sheets/>
- Desert USA: www.desertusa.com/animal.html

Vocabulary words

Abiotic: The non-living parts of the environment—rocks, water, climate.

Adaptation: A physical or behavioral feature of a plant or animal that helps it survive in its environment. For example, a hawk's talons help it catch and kill its food.

Camouflage: Concealment by means of disguise or a behavior designed to deceive or hide.

Canine: A conical pointed tooth.

Carnivore: A meat-eating animal.

Consume: An animal that eats either plants or other animals.

Decomposer: An organism that breaks down dead plant and animal materials into their chemical components through the process of decay. Example: mushrooms and other fungi.

Diurnal: Active chiefly in the daytime

Dung: The feces of an animal

Food Chain - A group of plants and animals in a natural community through which energy flows in the form of food.

Herbivore: A plant-eating animal.

Incisor: A front tooth typically adapted for cutting.

Molar: A tooth with a rounded or flattened surface adapted for grinding.

Nocturnal: Active chiefly at night.

Omnivore: An animal that feeds upon both plants and animals.

Predator: An animal that kills to obtain its food.

Prey: An animal killed as a food source by a predator.

Scat: An animal fecal dropping.

Scavenger - An animal that eats the remains of dead animals (carrion).