

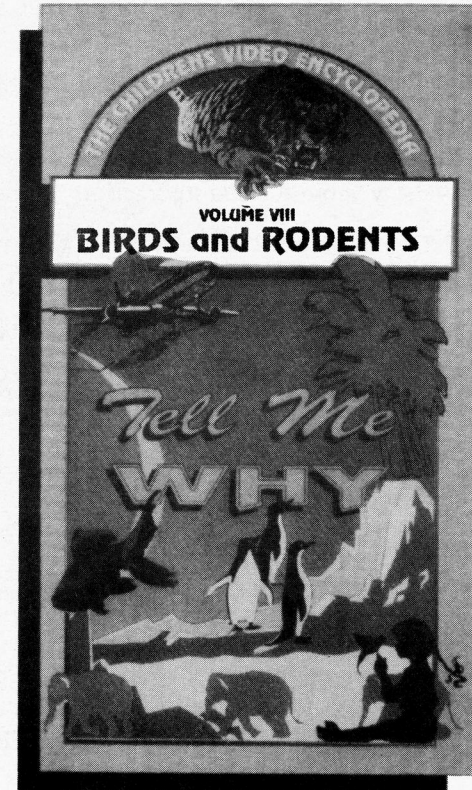
# GLOSSARY

1. ARBOREAL BIRD-one that lives in trees.
2. BILL-beak of a bird.
3. BIRD-warm blooded, egg laying, feathered vertebrate with forelimbs modified to form wings.
4. CAVY-guinea pig.
5. CREVICE-deep, narrow gap.
6. DAM-barrier to hold back water.
7. DEVOUR-eat hungrily.
8. DIALECT-variety of a language peculiar to a region or class.
9. DOWN-the soft, fluffy, feathers underneath.
10. EMPEROR PENGUIN-the largest penguin.
11. ENORMOUS-large.
12. FALCONRY-the art of training falcons to hunt game.
13. FEATHER-part of a bird's covering.
14. FLOCK-group.
15. FORMATION-the way in which something is arranged.
16. GNAW-bite away gradually.
17. GROUNDHOG-woodchuck or marmot.
18. GROUNDHOG DAY-February 2nd; the day the groundhog predicts the weather, according to legend.
19. HOLLOW-empty inside.
20. HOOVER-suspended in mid-air.
21. HUMMINGBIRD-a small bird that gets its name from the humming sound made by its vibrating wings.
22. INCISOR-cutting tooth.
23. INSTINCT-inherited ability.
24. INSULATION-the keeping out of heat, sound, or electricity.
25. KEEN-sharp.
26. LITTERS-newly born animals.
27. MAGNETIC LINES-lines of force that stretch from the north to the south magnetic poles.
28. MEMBRANE-thin organic tissue.
29. MIGRATION-movement of birds south in the fall and north in the spring, or moving from low land to highland, or from interior to seacoast.
30. MOCKINGBIRD-a bird that imitates calls of other birds.
31. MOLTING-the shedding of hair, feather, etc. for replacement.
32. NEST-place for bearing and sheltering young.
33. OUT EYED-each eye looks out at right angles to the bird and sees a completely different area.
34. PLUMAGE-feathers of a bird.
35. PREY-animal hunted for food.
36. QUARRY-object of pursuit; prey.
37. QUILL-the lower portion of a feather; hollow and pierced at the tip with a hole through which nourishment passes during growth.
38. RESISTANCE-opposition.
39. RODENT-any of the various related mammals, such as a mouse, rat, squirrel, or beaver having teeth adapted for gnawing.
40. ROOKERY-breeding ground.
41. ROOST-perch.
42. SHAFT-the upper, more slender portion of a feather.
43. SINEW-tendon; muscular strength.
44. SONG-a vocal musical sound.
45. STRIDE-long step.
46. SYRINX-structure found at the lower end of the windpipe of birds housing simple membranes.
47. TALON-claw.
48. TRAIN-those feathers from the lower part of the back of the peacock.
49. TRIASSIC PERIOD-the first period of the mesozoic era, characterized by dominance of reptiles.
50. VIBRATE-move rapidly back and forth.
51. WADDLE-walk like a duck.
52. WATERPROOF-water cannot penetrate.
53. WEBFOOT-foot with webbed toes.
54. WING-organ for flight of birds, insects, bats, etc.
55. WINGSPREAD-the distance between the tips of extended wings.

*Tell Me*

**WHY**

*TEACHER'S GUIDE*



**VOLUME VIII  
BIRDS AND RODENTS**

## SUGGESTED TEACHING STRATEGIES

1. Ask a guest lecturer from Audobon. Show the class a slide show of local or exotic bird species.
2. Report on the birds of North America. Research evidence on and types of prehistoric birds; have students suggest habitats for these birds.
3. Ask students to bring in feathers they may have collected, and attempt to identify them. Examine the feathers with a magnifying glass. Can you suggest why birds spend time preening?
4. For young students: Select a favorite bird for study. Children might even enjoy making models of birds or dressing up as a bird.
5. Find someone who decorates eggs as a hobby. Invite them in to talk about the types of eggs used and techniques used.
6. Ask an exterminator to speak to the class about rodent pests and control methods.
7. Ask a student to bring in his or her pet hamster. Assign students to record in a daily diary activities and interactions that are observed.

## CONCEPTS AND TERMS TO LISTEN AND WATCH FOR:

WARM-BLOODED	LETTER	VULTURE
PRE-HISTORIC	MAGNETIC FIELD	FALCONRY
QUILL	FORCE OF GRAVITY	BALL-AND-SOCKET
BIRD-SONG	DANCE	DOMESTICATED
MIGRATORY	ROOKERY	SCENT GLAND
SHIVERING	TALON	INVERTEBRATE
EXTINCT	WEB-FOOTED	FEATHER
NATURAL ENEMY	BROOD	COURTSHIP
NECTAR	GRUBS	DIALECT
PREY	SNOUT	DISPLAY
"BALD"	VERTEBRATE	GANDER
ADAPTATION	SINEW	HARDY
SAPLING	DOWN	BEAKER
BURROW	INSTINCT	GNAW
COLD-BLOODED	PLUMAGE	QUARRY
TRIASSIC PERIOD	FLY IN FORMATION	ARBOREAL
MILTING	FOSSIL REMAINS	INCISORS
SIGNALS	"TRAIN"	HIBERNATION

## QUESTIONS FOR THOUGHT, DISCUSSION AND FURTHER STUDY

1. Since the petrel only comes to ground during mating season, what questions come to mind about its lifestyle?
2. Study the Passenger Pigeon as a bird once prominent on the American landscape, and how an animal that existed in such vast numbers could become extinct in such a short period of time?
3. Investigate the adaptations observed by Darwin as he studied the finches of the Galapagos. Can you suggest how this study furthered his idea concerning the evolution of animals?
4. What characteristics of a bird's body makes it a "perfect" flying machine?
5. Describe the position of a bird's feathers on the wings up-and-down beat.
6. Relate the terms down, molting, and quills.
7. Why do birds sing? How do birds learn their song? What is a dialect?
8. How are feathers waterproofed; and how do birds stay warm?
9. How do scientists explain the differences in color and patterns within birds as they might relate to courtship and predator and prey relationships. Give some unusual examples.
10. Study varying nesting habits of birds looking for unusual nest adaptations.
11. Research the history of falconry as man from various civilizations has used predatory birds for hunting and sport.
12. Choose a specific bird species known to migrate. research when it migrates, trace its route on a map, determine how long it takes, and determine if any other plants or animals are relative to its successful migration.
13. How are the following terms related to bird migrations: biologic clocks, magnetic fields, flying information, and flocks?
14. How are eagles and penguins alike in mating characteristics?
15. Read about the bubonic plague that broke out in Europe during the middle ages. Suggest how the lifestyle during that period of history may have contributed to its devastating effects.
16. Explain how the tradition surrounding "Ground Hog Day" may have come about?

## CAREER OPPORTUNITIES

ANIMAL BEHAVIORIST	EXTERMINATOR
BIRD TRAINER	BIRD BREEDER
FARMER	FORESTER
ORNITHOLOGIST	PSYCHOLOGIST
MAMMOLOGIST	