



Smithsonian

Animal Health at the Zoo



TCM Teacher
Created
Materials

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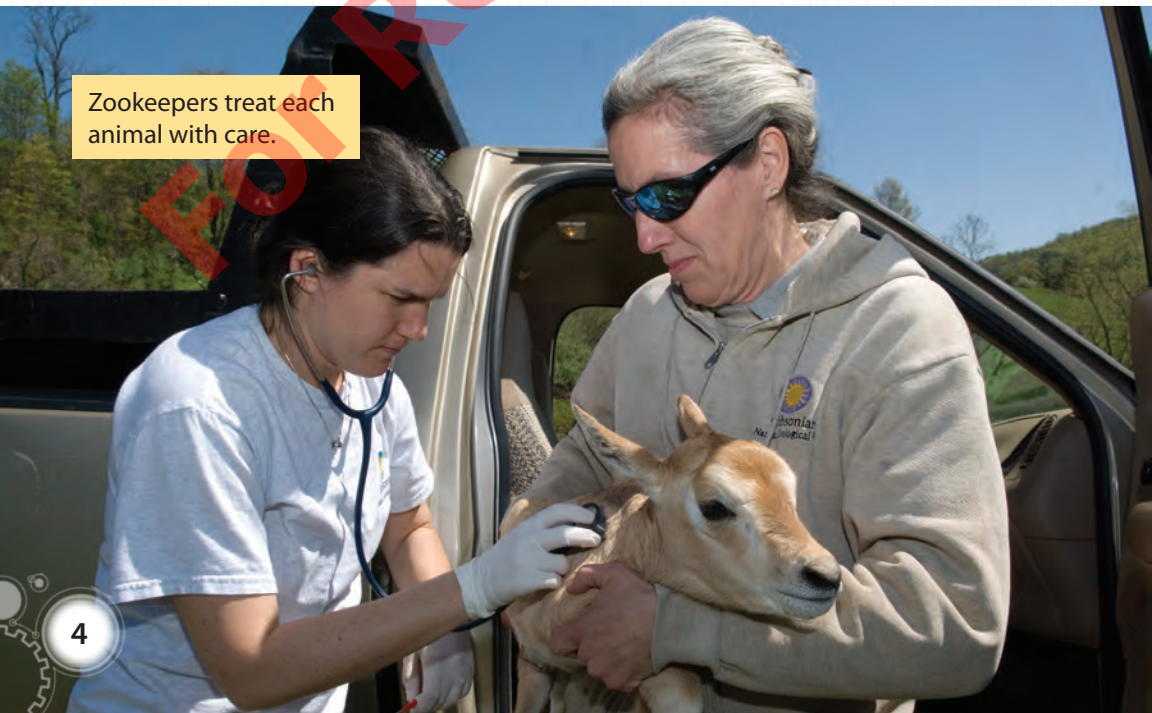
Zookeepers Care

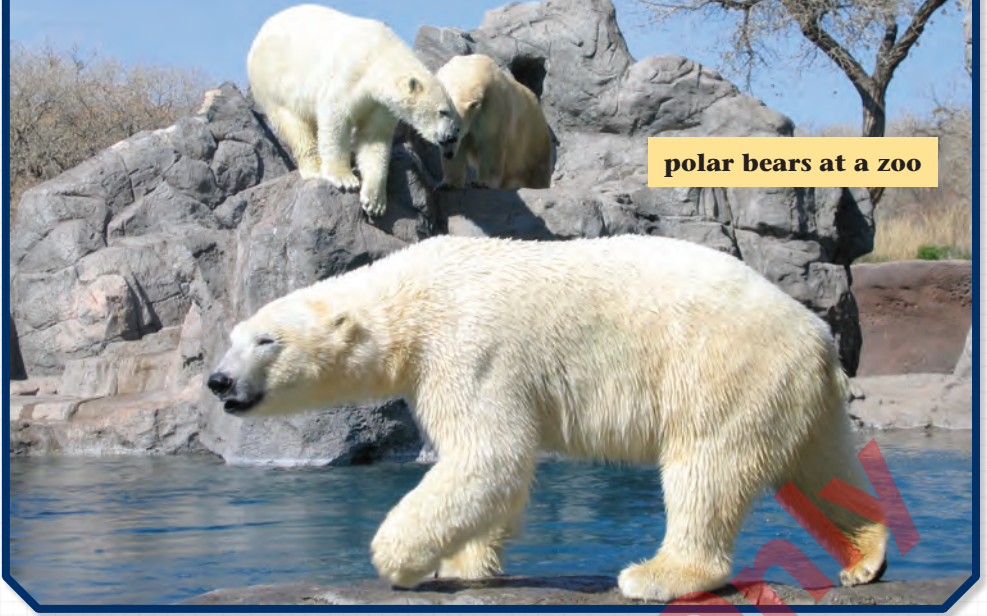
Are you an animal lover? Is your idea of a dream job caring for cute, cuddly creatures? Or, do you want to look after unusual or dangerous beasts? If so, you might want to consider a career as a zookeeper.

When animals live at zoos, they are not in their natural **habitats**. These animals can't act exactly how they would in the wild, but they still have natural **instincts**. They were born to behave in certain ways. Zoo animals still need to hunt, eat, rest, and **reproduce**. And, they need to do these things in environments that look like their natural habitats.

Caring for zoo animals is a lot more complicated than looking after domestic pets, such as cats or dogs. For example, hippos need large, clean pools to swim in. Lions need ways to hunt that don't involve killing other animals. Some **species**, including polar bears, may have trouble finding **mates** to reproduce with. If they can't reproduce, their populations could die out. Each species faces different problems and has its own needs.

Zookeepers treat each animal with care.





polar bears at a zoo

This is where zookeepers come in. Zookeepers feed animals, maintain their habitats, and make sure each creature can use its natural instincts. Zookeepers work hard to help the animals in their care live safe, happy, and healthy lives.



Zookeepers help animals in a variety of ways.



Lots to Learn

Zookeepers need training to prepare to work with all kinds of animals. In training, they learn skills that will help them do difficult parts of their job. But zookeepers can't learn everything ahead of time. While working, they might experiment with different methods and approaches. They do this because they have to meet the needs of the animals they care for. Zookeepers have to determine what animals need most when it comes to hunting, eating, and reproducing.





An Early Start

People who are interested in zookeeping may start their education in the field when they are young. In elementary and middle school, they may read lots of nonfiction books about animals. They may aim for good grades, especially in mathematics and science. When they get to high school, they can focus even more on these subjects. They can take science classes, such as **biology** and chemistry. Physics and calculus are important as well.

Students who want to become zookeepers can find ways to gain experience with animals. They may work at veterinary offices or animal shelters. Some of them may work on farms. Young adults can also volunteer at zoos. At the Smithsonian's National Zoo and Conservation Biology Institute, students can volunteer when they're 18 years old. They learn about the animals that live there. They also learn how to teach visitors about animal care and **conservation**.

Volunteers are limited in what they can do. They're not ready for direct contact with a zoo's many animals. But volunteering is a great way for people to test out the job of caring for animals. Then, if they like the work, they can take the next steps to pursue a zookeeping career.

Higher Education

Not all zoos require zookeepers to have college degrees. But working toward a degree in animal science, **zoology**, or another life science can be helpful. In college classes, students can learn valuable information about animal care. They typically study higher-level biology and microbiology. These subjects focus on the study of living organisms. Students might also study genetics. This is especially helpful for learning about animal reproduction.



Applying for Jobs

When it's time to find a job at a zoo, applicants with college degrees and relevant experience stand out from the crowd. This is because the field is competitive, even though the day-to-day work isn't glamorous. The job won't lead to great wealth. But people who want to work in zoos are focused and committed. They're excited about devoting their time and energy to helping animals. And they want to teach others about the animals, too. This is what being a zookeeper is all about!



SCIENCE

Saving the Sick

Zookeepers receive special training on animal behavior. They learn how to look for changes in the ways animals eat, breathe, socialize, and move. These skills are crucial because in the wild, animals hide signs of illness and injuries to stay safe from predators. But in zoos, if animals hide how they're feeling, they won't receive treatment. Zookeepers have to know the signs to watch out for.



STEAM CHALLENGE

Define the Problem

You are a volunteer at a zoo in your area. The staff at the zoo have asked you to create a new food enrichment toy that can be used in one of the primate (monkey, ape, lemur) enclosures at the zoo. You get to choose which primate you create the enrichment toy for.



Constraints: You may only use the materials provided to you.



Criteria: Your enrichment toy must create a challenge for the animal to get food. Also, it must be appropriate for the primate based on their behaviors, diet, and overall needs.



CAREER ADVICE

from Smithsonian

Do you dream of becoming a zookeeper?

**Here are some tips to keep in mind
for the future.**

"Being a zookeeper requires passion. Keepers care deeply about the animals that rely on them for their every need. Those who excel are always educating themselves—through workshops and training—to provide the best care for animals."

— *Jenny Spotten, Asia Trail Animal Keeper,
Smithsonian's National Zoo*

"Working with zoo animals has been an amazing opportunity to learn more about their biology and expand my knowledge of animal care. If you have a passion for animals, pursue your passion through volunteering at your local zoo or nature center to better understand what caring for these creatures entails. Be prepared to work hard! Caring for animals is anything but easy, but it's also very rewarding."

— *Jackie Spicer, American Trail Animal Keeper,
Smithsonian's National Zoo*



Read and Respond

1. What kinds of natural instincts do animals have?
2. How do zookeepers use science on the job?
3. What does it take to create the right habitat for a zoo animal?
4. Why are some animals more dangerous than others to zookeepers?
5. What do animals lose and gain when they live in zoos?
6. What ideas do you have for keeping animals safe, happy, and healthy at zoos?

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