

Caring for Rabbits During Extreme Weather—Hot/Cold

Rabbits, Level I

What Members Will Learn . . .

ABOUT THE PROJECT:

- How to care for rabbits during winter and summer
- How to recognize a rabbit in distress

ABOUT THEMSELVES:

- How we adapt to extreme weather

Materials Needed:

- Activity Sheet 5, Temperature
- Red pens or pencils
- 2-liter plastic soda bottles
- Carpet

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY

Every animal must adjust to changes in the environment. It pants or sweats if the temperature is too high, and shivers if it's too cold. The animal's heartbeat increases and it breathes faster when it runs or is under stress.

If the change in the environment or the amount of stress isn't too severe, an animal usually can adapt quite well. However, if the changes or stresses are too great, it won't be able to adjust. Animals that are healthy can endure short-term or minor stresses, but long-term or severe stresses will eventually be dangerous.

As summer temperatures rise your rabbit's fur coat becomes a problem. Wild rabbits can seek the comfort of their burrows in the cool earth during hot weather, but tame rabbits in hutches don't have that option. They rely on us to provide relief from the heat. Domestic rabbits need more protection from the direct sunlight, radiating heat and high temperatures of the summer months than they do from the cold wind and snow of winter.

The rabbit's normal body temperature is 102 to 103°F. Its "comfort zone" (the outside temperatures at which rabbits process feed most efficiently and gain weight the easiest) is 60 to 65°F. When temperatures become above 80°F, rabbits use more energy to remove heat from their bodies. Since rabbits don't perspire, they lose body heat through their breath and from air movement across their bodies.

Leader Notes

Divide the group into teams. Ask one team what they would need if they were a rabbit in a cage and the temperature was very hot. Have the other team decide what they would need if they were a rabbit in a cage in very cold weather. Have each team share their answers with the group.

Ask members how a rabbit can help cool itself when it is hot?

Leader Notes

Ask: Why is it important for rabbits to have large ears?

A rabbit's ears also help control its body temperature. As its body temperature rises, the blood vessels in the rabbit's ears expand and the blood flow through the ears increases. Rabbit ears are large and have very short fur on the outside and almost no fur on the inside. This combination of increased blood flow and the lack of fur means that more body heat can escape from the ears than from any other part of a rabbit's body.

When the temperature is above 90°F for four or five days in a row, it is too hot to try to breed the rabbits.

If the weather becomes too hot, rabbits may suffer from heat prostration. Fat or excited rabbits and does that are about to kindle are most likely to develop heat prostration. Rabbits with heat prostration have blue lips, tongue and ears; increased heart and breathing rates; wet nose and mouths; frothy, blood-tinged discharge from the mouth; and they pant heavily.

If a rabbit is suffering from heat prostration, lower its body temperature quickly or it may die. Put the rabbit in cool (not cold) water for a few seconds. (Be sure to hold the rabbit's head out of the water. A seriously ill rabbit may not be able to hold its own head up.)

Ask: How they can keep rabbits cool in the summer? Encourage group discussion.

There are several ways you can keep your rabbits cool in the summer. Use a sprinkler system to water the roof to keep the rabbitry cool. Use fans to move the air without creating drafts. You may set up awnings over outdoor hutches for shade. If it is extremely hot, put large plastic bottles filled with ice in the hutches. Put pieces of carpet or rags that have been soaked in cool water in the cages. Nursing bunnies can be put in wire nest boxes. If your rabbit is showing signs of stress, put it in an all-wire carrier and put in a dry, cool place. In the summertime, handle your rabbits in the cooler morning or evening hours.

Ask: How can you keep a rabbit warm in the winter? See how many each team can list.

There are several ways you can help keep your rabbit warm in the winter. You must protect the rabbits from direct contact with cold winds, snow, and rain. Face your hutches to the south or east. Setting the rabbitry next to a building, solid fence or woodlot, or covering the hutches with lightweight plastic sheeting also will provide a barrier against winter weather. Does and newly kindled kits, or does that are about to kindle, need extra attention in winter. Save clean, dry fur to help cover bunnies whose mother hasn't pulled enough fur to cover them. If the nest material becomes wet, replace it. Cold temperatures increase the energy needs of rabbits. This means you will need to provide plenty of proper feed and water for your rabbits to help them replace the body heat they lose. You need to water your rabbits two or three times per day when the temperature is below freezing.

Ventilation is important year-round, though you should avoid drafts. If insects such as flies are a problem, use insecticides, fly bait, or insect lights. Also, clean the rabbitry regularly.

DIALOGUE FOR CRITICAL THINKING:

Share:

1. In what type of weather do rabbits thrive?
2. What are ways to keep rabbits cool in the summer?
3. What are ways to keep rabbits warm in the winter?

Process:

4. How does a rabbit's ears help control its body temperature?
5. Why is it important to keep rabbits comfortable in hot or cold weather?

Generalize:

6. How do other animals keep warm in the winter or cool during the summer?
7. What are ways that you keep comfortable when it's hot or cold?

Apply:

8. What are ways that we control the temperature in our homes?
9. How are houses made differently for hot and cold climates?

REFERENCES:

Selecting Rabbit Equipment lesson
Cooperative Extension Service, Michigan State University

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Reviewed by:

Rabbit Design Team

Leader's Key, Activity Sheet 5, Temperature

- | | |
|--------|---------|
| 1. 95° | 6. 35° |
| 2. 95° | 7. 35° |
| 3. 35° | 8. 35° |
| 4. 95° | 9. 95° |
| 5. 95° | 10. 95° |



Cooperative Extension Service
Kansas State University
Manhattan

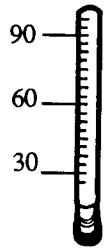
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CARING FOR RABBITS DURING EXTREME WEATHER—HOT/COLD

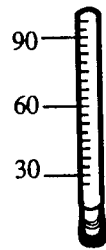
RABBITS, LEVEL I

Activity Sheet 5, Temperature

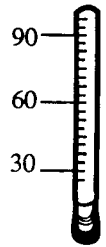
For each item below, use a red pencil or pen to show what the temperature might be when you would do the activity listed. Remember, summer days usually are around 95°F and the winter days around 35°F.



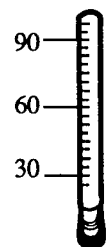
1. Sprinkle water on the roof of the hutch.



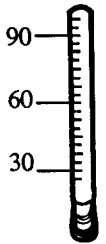
6. Place hutch next to a solid fence.



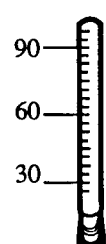
2. Turn fans on hutch.



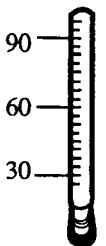
7. Cover the hutch with plastic.



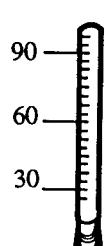
3. Face the hutch south.



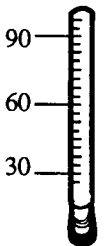
8. Cover bunnies with clean, dry fur.



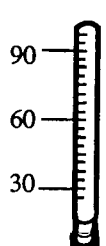
4. Put the hutch in shade.



9. Place water-soaked rags in the hutch.



5. Use a wire nest box.



10. Put large, plastic bottles filled with ice in hutch.