

JUNIOR ANIMAL HABITATS BADGE - MEETING 2

Badge Purpose: When girls have earned this badge, they will know more about wild animals and how to protect animal habitats.

Activity Plan Length: 1.5 hours

Time	Activity	Materials Needed
15 minutes	Getting Started <ul style="list-style-type: none"> Girls recite the Girl Scout Promise + Law 	<input type="checkbox"/> (Optional) Girl Scout Promise and Law poster
25 minutes	Building Animal Shelters <ul style="list-style-type: none"> Girls create an animal house 	<input type="checkbox"/> Writing utensils <input type="checkbox"/> Paper <input type="checkbox"/> Items from nature and home to act as insulation and “building” materials (i.e. mud, sticks, leaves, socks, tissues, etc.) <input type="checkbox"/> Package of Jell-O <input type="checkbox"/> Hot water <input type="checkbox"/> Mixing bowl and spoon <input type="checkbox"/> Small container with lid/sealed top (i.e. baby food jar or Tupperware)
25 minutes	Create a Butterfly Habitat <ul style="list-style-type: none"> Girls help protect animal habitats 	<input type="checkbox"/> Small flower pots or paper cups <input type="checkbox"/> Potting soil <input type="checkbox"/> Scoops, small trowels, or plastic spoons <input type="checkbox"/> Styrofoam packing peanuts or newspaper <input type="checkbox"/> Plastic or Styrofoam plates or lines (drainage for pots) <input type="checkbox"/> Seeds for caterpillar plants: dill, parsley, oregano, mint, nasturtium <input type="checkbox"/> Seeds for nectar plants: zinnia, marigold, phlox, alyssum <input type="checkbox"/> Cups or small mister bottles for water <input type="checkbox"/> Waxed paper or landscaping cloth <input type="checkbox"/> (Optional) Cling film and rubber bands <input type="checkbox"/> (Optional) Permanent markers
5 minutes	Nest Test <ul style="list-style-type: none"> Girls investigate what makes for poor and good insulation 	None



10 minutes	Snack Chat <ul style="list-style-type: none"> Girls enjoy a healthy snack while discussing what they have learned 	<input type="checkbox"/> Healthy snack
15 minutes	Wrapping Up	<input type="checkbox"/> (Optional) Make New Friends lyrics poster

Getting Started

Time: 15 minutes

Materials Needed: (Optional) Girl Scout Promise and Law poster

Welcome everyone to the meeting, recite the Girl Scout Promise and Law.

Activity #1: Building Animal Shelters

Time: 25 minutes

Badge Connection: Step 3 – Create an animal house

Materials Needed: Writing utensils; paper; items from nature and home to act as insulation and “building” materials (i.e. mud, sticks, leaves, socks, tissues, etc.); package of Jell-O; hot water; mixing bowl and spoon; small container with lid/sealed top (i.e. baby food jar or Tupperware)

Part 1: Insulate Your Own “Nest”

- Girls have watched how animals use their habitats and have thought about why animals live in certain areas. Now, they will take a look at the houses animals build in their habitats. Each habitat has unique challenges for animal builders!
- One of these challenges is temperature. Many animals use insulation to keep their homes cool in hot temperatures or warm in the cold. They may line a nest with feathers or burrow into snow or mud to hold in body heat. Try this experiment with the girls to see how insulation in a nest works.
- Make a Jell-O Nest!
 - Mix a package of Jell-O. Immediately pour a portion of the liquid into a small container with a lid or sealed top, like a baby food jar. Then pour the rest of the Jell-O mixture into a mixing bowl.
 - Insulate the small container of Jell-O the way an animal might insulate its nest. You could bury the container in leaves and sticks in the yard or use materials in your house, like socks.
 - Keep the small container of Jell-O in its warm, insulated place. Keep the mixing bowl of Jell-O in the same area as your nest container, but make sure it stays uncovered and out in the open.
- Put the Jell-O aside to set. You’ll check on the Jell-O again in Activity #3.

Part 2: Make Your Own Animal House

- Another challenge that animal builders face is how to build a home that protects them from predators and the elements. Meerkats live in large underground burrows with several entrances. Beavers make dome-shaped homes called lodges with branches and mud—and they usually have an underwater entrance.
- As a group, find out more about animal homes like these.
- Ask girls to try sketching their own meerkat burrows or building their own beaver lodges from sticks. Or, they can build a home for an entirely different animal. Remind them to think about what they’ve learned so far about animal homes.
- Have girls share their “home” with the group and explain how and why it works.



Activity #2: Create a Butterfly Habitat

Time: 25 minutes

Badge Connection: Step 5 – Help protect animal habitats

Materials Needed: Small flower pots or paper cups; potting soil; scoops, small trowels or plastic spoons; Styrofoam packing peanuts or newspaper; plastic or Styrofoam plates or liners (drainage for pots); seeds for caterpillar plants: dill parsley, oregano, mint, nasturtium; seeds for nectar plants: zinnia, marigold, phlox, alyssum; cups or small misters for water; waxed paper or landscaping cloth; (optional) cling film and rubber bands; (optional) permanent markers

Prep Needed:

- If spring is a long time away, focus on the herbs for larval plants, as the girls should have better luck keeping them going until they can be placed outside. Also, the herbs can be trimmed regularly for use in the kitchen and still be ready for spring.
 - The amount of seeds needed depends on how many kinds you want to plant, what size pot you can find, and whether you want the girls to plant just a nectar plant pot, just a caterpillar plant pot, or one of each.
 - You may want to divide the potting soil in advance into a few Ziploc bags to speed up the scooping process and keep down the amount of spillage.
1. Have the girls help cover the tables in newspaper or tablecloths, or make sure you allow time for extended clean up at the end.
 2. Get some helpers to hand out materials: one or two pots, liners for each, scooping tool. Make sure everyone will have access to the potting soil and packing peanuts. If there's going to be time for decorating, do it now before the pots are full of dirt.
 3. First, each girl should take a small piece of waxed paper and put it in the bottom of the pot over the drainage hole. This is not going to keep covering the hole; this is just so you can get the pot home without leaking soil on the way. When the girls get home, they can use a pencil or stick to poke a hole through the waxed paper. Or, a square of landscaping cloth can help get everything home; the cloth will drain, so doesn't have to be removed.
 4. Then, have them take some of the packing peanuts and break them into slightly smaller pieces, and put them in the bottom of their pot. The pieces should still be bigger than the drainage hole in the bottom. Alternatively, you can use a handful of pebbles, some wadded up newspaper, or pieces of broken terra cotta pots to help with drainage.
 5. Girls should then fill their pots with a partner – taking turns, one holds the pot steady while the other scoops dirt into the pot. Encourage them to take their time. Fill the pots so there is still between half an inch and an inch of clearance between the top of the dirt and the rim of the pot.
 6. Instructions on how far apart to plant the seeds will depend on the specific plants chosen; read the seed packets and plan accordingly.
 7. Have the girls add a small amount of water to each pot. The soil should not get waterlogged, but will need to stay moist. Girls should check their pots every other day, and try not to add too much water at a time. Misting bottles can help.
 8. If desired, cover with cling film and secure with a rubber band – the pot still needs to stay upright for the seeds to stay in the right place, but at least there won't be mud to clean up if it tips over.

Activity #3: Nest Test

Time: 5 minutes

Badge Connection: Step 3 – Create an animal house

Materials Needed: Nests and Jell-O from Activity #1

1. Check the unprotected Jell-O in the mixing bowl. Has the Jell-O set? How thick is it?
2. Check each of your nests. What consistency is your Jell-O? Jell-O needs to cool in order to set, so if the mixture is still liquid, you'll know your insulation would have kept the animals inside warm.
3. Are there any similarities between the nests that were most effective? Is there anything you would do differently next time?



Activity #4: Snack Chat

Time: 10 minutes

Badge Connection: Questions link to multiple badge steps

Materials Needed: Healthy snack

While enjoying snack, here are some things for girls to talk about:

- What do we need to make a healthy habitat for ourselves?
- What things do we do to keep that home habitat the best it can be?
- What kinds of things do animals do to “upgrade” their basic habitats that are like what we do with our homes?
- What do you think you would add to make your home habitat a “dream habitat”?

Wrapping Up

Time: 15 minutes

Materials Needed: (Optional) Make New Friends lyrics

Close the meeting by singing Make New Friends and doing a friendship circle.

More to Explore

- Field Trip Ideas:
 - Visit a store specializing in outdoor clothing and gear, and find out about the kinds of clothing that provides us with waterproofing and insulation.
 - Join in a local park clean up or habitat restoration project.
- Speaker Ideas:
 - Invite someone who has worked on gardens, landscaping, or other environments for specific animals or plants, such as gardening for birds or restoring prairies.
 - Talk to someone who knows what your neighborhood—and natural environment—was like fifty years ago, a hundred years, or even more.

