

*Grizzly Adams  
Handbook*

*outdoor survival and nutrition*

# BACK YARD SALVE AND SALADS

<b>Focus</b>	To guide inquiry and investigations of plants in their natural state during the late winter and early spring months.
<b>Group Size</b>	Entire class
<b>Time Required</b>	2.5 hours
<b>Materials</b>	Discovery Journal Pencil <i>Optional:</i> Thermos of boiling water Paper cups and litter bag Tea ball Handout: <i>Forest Pharmacy: Medicinal and Edible Plants at Cispus</i>
<b>Physical Setting</b>	Covel Creek Trail/ Braille Trail
<b>Process</b>	1. Instructor leads students to the trail head of Covel Creek Trail and reviews trail use and procedures ( <i>1-2-3 Left-Right-Left and Keep It Green</i> ). Then leads the group down the trail, pointing out and sampling the plants. Take care not to over-sample areas or to sample endangered/rare plants.

*A hike down any of the Cispus trails during the winter or early spring months can be beneficial even if plants are not budding or flowering. The following represent a few procedures that have met with success in ensuring a safe and productive trip.*

**TRAIL PROCEDURES:** While students may sample certain plant parts in small quantities, it should be emphasized that no plant may be completely removed from its surroundings (pulled up by the roots). Nor should students ever venture off a marked trail prior to checking with their instructor.

**LAP BOARDS:** A Discovery Journal (with a simple lap board made of wood laminate covered with a small sheet of visqueen) acts as a sketch board with which a student can draw or make notes of tastes or procedures encountered while on the trail.

**THERMOS:** Bringing a thermos of boiled water adds a special end-of-trail-treat. Students may search for wild ginger along the trail and gather about ten medium-sized leaves. These leaves go into the tea ball, which is deposited into the thermos. If allowed to brew for about 45 minutes, the leaves will make an enjoyable herbal tea.

# DO-IT-YOURSELF SURVIVAL KIT

**Focus** To use discussion, guided inquiry and creative problem solving skills in creating a usable survival kit for hiking or camping.

**Group Size** Entire class

**Time Required** 45 minutes

**Materials** Per student/survival kit:

Foil pan	Wooden matches	Sugar cubes
Scissors	Electrical tape	Tea bags
Bouillon cubes	Small whistle	2 salt packets
Fire starter/flint	Plastic wrap	Plastic film cannisters
Sandpaper	First-aid kits	Emergency candle
Nylon fish line	Fish hook	H <sub>2</sub> O purification tablets
2, 30-gallon garbage/leaf bags	1-gallon size ziplock plastic bag	

Handout: *Survival Kit Basics*

**Physical Setting** Standard classroom, with a follow-up activity at the Cispus River

**Process** **Activity 1: BUILDING YOUR KIT**

1. Discuss the body necessities in a survival situation. Stress the need for warmth, protection from the weather and energy needs. Ask how you could prepare a small, yet effective packet to meet all these needs (kits should be able to fit into the 1-gallon ziplock bags). Make a list on the board of all the items suggested. Refine the list to meet space and efficiency requirements.

2. Once you have decided upon the essentials, it is time to put your kits together. Use the 1-gallon size ziplock plastic bags to seal up all the items in your kit. Write names on the bags using a permanent marker. Stress organization and neatness in packing the kits.

**Activity 2: ONE MATCH FIRE CONTEST**

1. In the classroom discuss common sense fire rules. Divide the class into groups of 5 students.

2. Discuss/brainstorm various ways to build a fire and tell them that their challenge will be to start a fire using only one match. The key is in the planning and preparation.

*Use an area down at the Cispus River for this activity.*

*This is great for the early evening. As the sun sets you can have marshmallows and songs by one of the fires.*

## *Survival Kit Basics*

*The kit that you design should help you to meet the necessities of life during an outdoor emergency situation. It will contain items to provide for the following needs:*

### **INSTANT INTERNAL WARMTH:**

*Treatment for accidental body heat loss.* Your inner body must be at or near the optimum temperature of 98.6F, for living cells to produce the energy to sustain life. Use the foil pie pan for a cooking pot, and candle and matches as heat sources.

### **INSTANT BODY PROTECTION:**

*Conserve your limited energy supply.* Plastic garden bags help retain the vital, warm air layer around your body by keeping you dry and lessening the transfer of warm air with cold air.

### **INSTANT ENERGY:**

*You will have a given amount of energy at the time of your emergency.* It can be conserved to last a long time, or it can be used up very quickly. Sugar, bouillon cubes and salt packets give your muscles what they need to maintain a chemical balance and keep your body at a nearly constant 98.6F.

## *Survival Kit Content Suggestions*

### **FOIL PAN**

Pot pie-size to use for boiling water. Pack some of the smaller items in it.

### **CANDLE**

Emergency or plumber's candle will help kindle a fire or heat 1/4 cans of water.

### **MATCHES**

Wooden matches will provide the spark for a heat source. Cut and glue a small piece of sandpaper to the inside lid of the container holding the matches. Use it to strike the matches.

### **LEAF/GARBAGE BAGS**

Use a 30-gallon size bag. Pull one bag up over your legs (punch holes for feet) and tuck the rest into your pockets to protect legs from wind and rain. Cut a hole in the sealed end of the other bag for a face and head opening. Do not leave your face covered. These bags can be used for protection from rain, cold and sun.

### **SUGAR CUBES, BOUILLON CUBES, SALT PACKETS, AND TEA BAGS**

Six cubes of sugar will give you the instant energy needed to move muscles for heat production. Bouillon cubes will help maintain your internal warmth. The human body needs adequate salt to keep body chemistry balanced. Adequate salt intake will also help retain moisture in your system. It's important to drink as much as 3 quarts of water a day.

### **WATER PURIFICATION TABLETS**

Drop the tablets in water which is not boiled. This will help prevent *giardia* and other water impurities which can make you sick.

- TAPE:** Electrical tape may be used to close face openings, patch clothing, secure top and bottom plastic, emergency bandage tape, etc. Attach tape to the inside of the ziplock bag.
- FISH LINE & HOOK:** These can be used for fishing and repairing things.
- PLASTIC FILM CONTAINERS:** Plastic film containers work well for storing sugar cubes, bouillon cubes, water purification tablets and matches. Fish line and hook can also fit into a film container.
- FIRST-AID KIT:** The contents of this kit can help patch you up and save your energy until you can reach help.
- SMALL WHISTLE:** The surrounding trees muffle shouts, but a whistle will sound out clearly. Also, you can sound it for a long time without becoming tired.
- SMALL MIRROR:** A mirror can be used to reflect light and signal help. It can also be broken and used for a cutting edge if you don't have a knife.
- BOX-CUTTER/  
SINGLE-EDGE  
RAZOR BLADE:** A box-cutter or single-edge razor blade is sharp enough to use in cutting a variety of things.
- PIECE OF WIRE:** Wire is useful for tying and repairing things.

### **Fire Building:**

- a. **COLLECT MATERIALS** ahead of time
- b. **BUILD AWAY** from overhanging trees or bushes
- c. **CHOOSE** an area protected from wind
- d. **CLEAR GROUND** area well
- e. **FIRE CIRCLE** should be made of stones
- f. **KEEP FIRE SMALL**
- g. **MAKE PILES** of tinder, kindling and larger pieces of wood
- h. **LAY FIRE CAREFULLY**, starting with tinder and building with kindling; add larger pieces last
- i. **PUT FIRE OUT DEAD** before leaving. It should be cool enough to touch. **DROWN** with water & cover with dirt.

# ***SURVIVAL SNACK***

- Focus** To create a nutritious snack that meets the energy needs of hikers, using guided inquiry and discussion.
- Group Size** 5-10 students
- Time Required** 30 minutes
- Materials** Measuring cups                      Mixing bowls  
Large spoons                              Large cookie sheet  
Jar with a lid                              Zip-lock plastic bags  
Granola ingredients  
Oven (*the Cispus cooks are willing to accomodate your needs if you let them know well in advance. I have found that 9-10 a.m. is a very good time for them.*)  
Handout: ***Granola Recipe***
- Physical Setting** Dining hall (*preparation*), Angel Falls trail (*hike & snack*)
- Process**
1. Tell your students that they will be taking a strenuous hike through the woods and part-way up a mountain leading to Angel Falls. The hike requires students to examine ways to practice energy conservation. They will need to prepare a survival snack.
  2. As a group, discuss some basic energy needs and brainstorm foods that will provide a lot of energy. Make a list of the ideas, then have the students decide which items would be best for their survival snack.
  3. Explain that there are some basic ingredients needed for their granola snack. Discuss the benefits of each. Then have the group decide which items from their list they would like in their high energy snack. Have on hand many popular additions such as M&M/s, chocolate chips, raisins, nuts, etc.
  4. Divide the class into two groups, one for dry ingredients and one for liquid ingredients. Hand out the basic recipe and have each group begin mixing. When both dry and liquid ingredients are mixed, follow the recipe to completion. Have a counselor or adult stay around to remove the granola from the oven and stir in the remaining, meltable ingredients.
  5. Counselors or small groups of students put the granola into bags. Leave the bagged granola with the cooks, they will put it into sack lunches for the hike to Angel Falls. If you are not taking a lunch along, take the packed granola with you. Encourage hikers to eat the snack whenever they take a rest stop and need some energy. **Remind them to carry all garbage back to camp.**

# Granola Recipe

## BASIC INGREDIENTS

8 cups rolled oats  
1.5 cups packed brown sugar  
1.5 cups wheat germ  
8 oz. package shredded coconut  
1.5 cups sunflower seeds  
1.5 cups peanut halves  
0.5 cup vegetable oil  
0.75 cup honey  
0.25 cup water  
2 tsp. vanilla

## SUGGESTED INGREDIENTS

M&M's (original, peanut butter, almond)  
Dried fruit  
Reese's pieces  
Raisins (brown, white)  
Chocolate chips (dark or white)  
Butterscotch chips  
Almonds, cashews

## **Directions:**

### 1. **BLEND** in a large bowl:

8 cups rolled oats  
1.5 cups packed brown sugar  
1.5 cups wheat germ  
8 oz. shredded coconut  
1.5 cups sunflower seeds  
1.5 cups peanut halves

### 2. **SHAKE** to mix in a jar:

0.5 cup vegetable oil  
0.75 cup honey  
0.25 cup water  
2 tsp. vanilla

3. **POUR** liquid mixture over dry mixture in a large bowl. **ADD** any additional, non-meltable goodies. **STIR** with a large spoon until all ingredients are moistened.

4. **SPREAD** moistened ingredients over a foil-covered baking sheet.

5. **BAKE** at 325F for 25 minutes. **STIR** once during baking.

6. **COOL** baked mixture.

7. **ADD** meltable ingredients to cooled mixture.

8. **STORE** in sealed plastic bags.

9. **ENJOY!**



## AIMING FOR SAFETY

<b>Focus</b>	To train students in the necessary safety precautions required to practice archery.
<b>Group Size</b>	10-12 students
<b>Time Required</b>	10 minutes
<b>Materials</b>	Targets ( <i>set up at the archery site</i> ) Bows & arrows Arm guards and finger ( <i>opt.</i> ) Adult who is a designated safety coordinator
<b>Safety</b>	Hair tie for longer-haired students Snugly fitting clothing w/o front pockets or large, loose collars Necklaces should be removed, or tucked underneath a shirt.
<b>Physical Setting</b>	All archery at Cispus must be done at the archery site. The site is located at the end of Lassoie Way, behind the bird blind and the houses. Check with the office to make sure that anyone using the ACE course is aware that archery is occurring.

**Process** *Before students handle any archery equipment they must receive safety training.*

**Resources:**

Bows, arrows, quivers and wrist guards are available in the Recreation Storage Room in the Education Building. The Cispus Library has three books on archery equipment and technique.

The books are:

The Complete Beginner's Guide to Archery, B.A. Roth, call # 799.3 RO.

Archery, Ronald Sports Library, Natalie Reichart and Gilman Keasy, call # 799.3 RE.

National Archery Association Instructor's Manual, Baier, Bowers, Fowkes, and Schoch, call # 799.32 Na.

1. Demonstrate to students how to string a bow. Explain top and bottom of bow, and teach names for parts of the bow. Have each student string and unstring a bow.
2. Show students the different parts of an arrow and explain each part's function. Demonstrate why the one odd-colored feather (cock feather) on each arrow needs to point away from the bow, when loading the arrow onto the bow (if loaded any other way the feathers will catch on the bow when the arrow is shot).
3. Make sure that no one loads an arrow until the safety training is complete!!! When loading the arrows, have students in single file lines behind each bow. It is a good idea to have only one bow for each target. Have the adult show the students how to load, sight, and shoot an arrow. Be sure to emphasize the importance of never pointing a loaded bow at another person! Students must also never walk in front of anyone who has a loaded bow. Let each student practice shooting a few arrows. Make sure all bows are put down before allowing students to retrieve the arrows that were shot.

It is very helpful to have a verbal or whistle signal to commence shooting, laying down bows, arrow retrieval, and stop shooting/emergency. Allow students to nock or load arrows only after signal is given.



## ***BE PREPARED, OR...!?***

<b>Focus</b>	To use guided inquiry, discussion, and observation to understand the ease and necessity of traveling with survival materials.
<b>Group Size</b>	16-20 students maximum
<b>Time Required</b>	20-50 minutes ( <i>with extensions</i> )
<b>Materials</b>	Pen, pencil Writing surface ( <i>clipboard, notebook</i> ) Handout: <b><i>Be Prepared, Or...!?</i></b>
<b>Physical Setting</b>	Survival-Mountaineering Room
<b>Process</b>	<b>Activity 1: "Be Prepared, Or ...!?"</b> 1. Take your group into the Cispus Survival-Mountaineering Room located near the library in the Education Building. 2. Allow time for the students to examine the room on their own-about 5 minutes. 3. Direct your groups attention to the activity, <b>Be Prepared, Or...!?</b> 4. Divide your students into smaller groups to work together cooperatively. 5. You may want to brainstorm with the whole group for question 9; here are some possible responses: "Never travel alone....tell someone not in your hiking group specifically where you are going....register with a local Ranger Station."

## ***BE PREPARED, OR...!?***

1. Examine the, "Do It Yourself Pocket Storm Survival Kit," shown on the wall. Since hikers are usually concerned about weight and space, estimate the combined weight of the objects shown. Estimate the amount of space, or size of container needed to place all the objects shown.  
Weight \_\_\_\_\_ Container Size \_\_\_\_\_
2. List any additional items you would include-keeping in mind the needs of light weight, and small space. (List at least 3)  
1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_
3. Look at the photograph of the climber next to the windows. Is there any single item the climber could safely do without?  
  
If, "yes," then name it/them here:  
\_\_\_\_\_  
\_\_\_\_\_
4. Are there any particular items not shown you think should be present?  
List them here.  
1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_
5. On the wall are shown items used in the outdoors and in climbing from an earlier time. Discuss, then explain below how some items have changed.
6. What are the main advantages of modern equipment? What are some of the new materials used, not present in the older gear?
7. Most people using the forest lands aren't climbers. What are some essential items that should be taken for a two night stay in the wilderness? (List at least 5, with the top 5 being absolutely essential)  
1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_
8. Name the items on your list that can be easily located now in your home.

9. Even people who have the essentials, and are physically fit, get themselves in life-threatening situations, like hypothermia or falling and injuring themselves, or losing equipment. What else should you do when traveling in wilderness areas?

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

10. What kind of information would be helpful to know for your trip when stopping at a ranger station?

11. What kinds of things do you think the ranger will ask you, and tell you?

## ***BY NATURE'S RULES***

- Focus** To acquaint students with the dangers of traveling in the mountains unprepared, using film observation, a written activity, and discussion.
- Group Size** 20 students
- Time Required** 1 hour
- Materials** Pen, pencil  
Film: "*By Nature's Rules*"  
Handout: *By Nature's Rules*
- Physical Setting** Your own classroom, or the Cispus Center Survival and Mountaineering Room
- Process** **Activity 1: BY NATURE'S RULES**
1. Make copies of the handout by the same name.
  2. View the film, "*By Nature's Rules*."
  3. The students may complete the handout, or use for discussion purposes.
  4. Stop the film after 5 minutes; have students answer questions 1-5, then proceed the rest of the way through the film.

### **Extensions:**

1. Have your group examine displays in the Survival/Mountaineering Room, especially the Survival Kit.
2. Have your group make their own lists of things for a survival kit.
3. Have your group make a list of things to do to prevent hypothermia.
4. Do Activity, *Do-It-Yourself Survival Kit*, pp. SN-2,3,4 *THE CISPUS EXPERIENCE*.

## *By Nature's Rules*

1. What do the newspaper headlines say about the friendliness of nature?
2. Why would an experienced outdoorsman just sit down and die?
3. What are some facts the doctor explains about hypothermia? (list at least three)
  - 1.
  - 2.
  - 3.
4. Why doesn't a victim do something to help her/himself when they have the means to do so?
5. Which person in the movie is most like you?
6. In what ways are some in the hiking group unprepared? (find at least three)
  - 1.
  - 2.
  - 3.
7. When does this group respond to being wet? When should they have protected themselves?
8. What is the material in Dan's pants that will keep him warm?
9. How does being wet next to your skin affect your body's ability to maintain your body temperature?

10. Why didn't the group stop sooner to get on warmer clothes?
11. What kind of a person did this group of hikers lack that every group traveling together should have?
12. When some of the hikers started tiring and getting cold and wet, what did they decide to do?
13. What early signs of hypothermia did Martin show?
14. What did Jill forget at one stop? What ability was she losing as hypothermia began to take over her body?
15. At mid-day what important fuel building activity was ignored?
16. Although Peter was strongest, what was happening to him?
17. What happened to Jill? Fully describe her symptoms.
18. When Don finally took charge, what were some of the things he did to help? (list at least four)
  - 1.
  - 2.
  - 3.
  - 4.
19. Why couldn't Peter help himself to get warm?
20. How did the person you identified with fare?

# HANG ON!

<b>Focus</b>	To equip students with strategies to help them control fear and panic so positive decisions can be made in a survival type situation.
<b>Group Size</b>	Small group or Entire class
<b>Time Required</b>	45 minutes
<b>Materials</b>	Journals or teacher prepared handouts Pencil Blindfolds
<b>Physical Setting</b>	Classroom and trail
<b>Process</b>	<ol style="list-style-type: none"><li>1. Review priorities of life through discussion. Review S.T.O.P. (<u>S</u>top, <u>T</u>hink, <u>O</u>bserve, <u>P</u>lan) and the concept that potential for survival is enhanced when fear is controlled to allow calm, positive decisions to be made.</li><li>2. Members of group share experiences where they felt lost, afraid or threatened and how that problem was resolved.</li><li>3. Teacher input: FIGHT or FLIGHT... Neither will help in survival situation. Both are potentially destructive.</li><li>4. Teach Deep breathing technique for calming and overcoming panic. Practice breathing. Discuss the calming effect they experience. Their reactions may be recorded in their journal.</li><li>5. Teach the "holding on" technique. Having something to hold onto can provide a sense of security. Have students stand on one foot and move about without holding onto any object or person. Discuss how having something to hold onto increases their feeling of security.</li><li>6. Trail simulation (Use any trail near Cispus campus) Situation: Students pretend to be lost in woods at night. To simulate situation, use blindfold. Have students move about and describe their feelings and reactions. Have students hold onto tree, stump, log, or other object. Have them describe how having something to hold on to helps to provide sense of security.</li><li>7. Students can write in journals about this experience and about how they would use breathing, "holding on," and S.T.O.P. to help them remain calm in survival type situation.</li></ol>

**Deep Breathing Technique:**

- Long slow breath in (5 counts)
- Hold breath (5 counts)
- Slow exhalation (5 counts)
- Repeat sequence ten times

**Option:** whole group or small group closure can be done orally.

## ***SURVIVAL SIMULATION***

<b>Focus</b>	To provide an opportunity for students to apply knowledge of priorities of life in a simulated outdoor survival situation.
<b>Group Size</b>	10-16 students
<b>Time Required</b>	2.5 hours
<b>Materials</b>	Journal or drawing paper Clipboard Pencil Handout: <i>Will You Survive?</i>
<b>Physical Setting</b>	Area west of Yellowjacket Ponds ( <i>Ponds are on north side of Yellowjacket Creek</i> )
<b>Process</b>	<ol style="list-style-type: none"><li>1. Students and teacher review priorities of life (oxygen, safety/freedom from injury, shelter to preserve body heat, water, food)</li><li>2. Students and teacher review group and trail procedures.</li><li>3. Group hikes approximately 1.0 mile to simulation area following the creek trail east to the bridge over Yellowjacket Creek. After crossing the bridge, the group walks through the park to the forested area west of the ponds. Students or instructor may identify materials (natural or of human origin) that have a potential application to surviving in an emergency situation.</li><li>4. Upon arrival, teacher distributes handout and reviews simulation tasks and procedures. Students are paired with a partner for the activity. The area limits for the activity are defined for the students.</li><li>5. The task situation: Pairs of students are "lost" in this location. They may have to survive through one or two nights in this environment. It will be dark in one to two hours. There is a high probability of rain and the overnight temperatures may dip into the low forties. They are dressed in the clothes they are wearing for this activity period.</li><li>6. Student pairs survey area and identify a location for a shelter which will meet criteria for keeping them dry and out of the wind. They will identify and list rationale for choosing their site. They will sketch plans for improvements which will increase the</li></ol>



effectiveness of their shelter site, including use of any raw materials available in the immediate area. The amount of energy and time needed for the accomplish the improvements are listed. (Time allocated for this task should be approximately 20 to 30 minutes). The student pair will prepare to "share" their site with the rest of the group.

7. The teacher monitors and charts the shelter location for each pair. Assistance may be provided to students in form of questions designed to help them evaluate their site and process.

8. The teacher signals the group to reassemble.

9. The group walks to each shelter site. Each pair makes a short presentation about their site, including possible improvements and time/energy required to make it effective. The teacher or other students may ask questions or offer suggestions and feedback to the presenting pair. The pair will evaluate their shelter plan as to its effectiveness in keeping them warm, dry and its potential that they would survive in a real situation comparable to that in the simulation..

# Will You Survive?

You and your partner are lost in this location. It will be dark in one to two hours. The overnight temperatures may dip into the lower forties and there is a high probability of showers. Using your knowledge of the priorities of life, work with your partner on the following tasks. Remember, your ability to think, cooperate, and use the knowledge that you have are the keys to surviving in this type of situation.

**TASK #1:** Survey the area within the limits established by your teacher. Look at all potential sites for a shelter which will keep you dry, out of the wind, and help you maintain your body heat. Pick a site for your shelter. List the reasons you and your partner picked this site.

**TASK #2:** Brainstorm with your partner possible improvements you can make to your site using any raw materials available in the immediate area. Sketch what your shelter would look like if you made the improvements. (DO NOT CONSTRUCT A SHELTER OR DISTURB ANY MATERIAL IN THE AREA). Identify and list how much time, energy and effort will be needed to make the improvements you have in mind for your shelter.

**TASK #3:** With the help of your partner, prepare to tell the whole group about your shelter. Share your shelter with the group and answer their questions.

**TASK #4:** Participate with the whole group in listening to the presentations by the other pairs. Ask questions you have about their site and plan. Make any comments and suggestions you feel would help them.

**TASK #5:** Evaluate how well you and your partner were able to cooperate and solve problems together.

**TASK #6:** Based on your knowledge of the situation, your simulated shelter, and the quality of your teamwork with your partner, rate your chances of surviving in the situation presented in this activity.

- 1 = No chance! We're goners.
- 2 = Its possible but we are at risk.
- 3 = We're winners. We'll make it!