

Sustainability Merit Badge Workbook

1 INTRODUCTION

Dear Scout,

I'm glad that you're interested in Sustainability, and I hope you're as enthusiastic about conserving our earth's resources as the staff here at the Summit. Our goal in taking you through the requirements of this merit badge is to make you aware of the impact we make on our planet every day and to help you develop ways to lessen the impact that you and your family make.

Sustainability is one of the four core values at The Summit and a focus in the BSA as a whole. If you can get a hold of a copy of the Sustainability Merit Badge Pamphlet it has a section dedicated to the sustainability initiatives here at The Summit. The pamphlet will also be very helpful in completing the requirements for the badge. Don't worry, you won't be reading out of the book when you get to camp!

If you would like to complete the merit badge in its entirety please finish this workbook honestly and thoroughly. Trust me, the merit badges you work hard to earn will make a bigger impact and mean more to you down the road.

Sincerely,



Phillip Ferrier

Director, James C. Justice National Scout Camp

Tim Borden

Sustainability & Ecology Director

P.S. – If you can, get started on the right foot by filling this form out digitally rather than printing it!



2 REQUIREMENT OVERVIEW

This is just an outline of the requirements used by the Justice Scout Camp Program. For a list of the full requirements, visit the following webpage: <http://www.scouting.org/scoutsource/BoyScouts/AdvancementandAwards/MeritBadges/mb-SUST.aspx>

1. Sustainability in your own words

2. Do the Following:

Water A: Water Usage Plan

Water C: Drought Practices

Food A: Food Waste

Food B: Food Production

Community A: Community Sketch

Community C: Housing Needs

Energy A: Energy Sources

Energy B/C: Household or Transportation Energy Usage

Stuff A: Stuff Log

Stuff C: Stuff Effects

3A. Planetary Life Support

3B. Raw Materials Extraction

4A/B/C/D/E/F. Research & Family Discussions on two topics

5A. Family Recap

5B. Scout Oath, Law & Sustainability

6. Careers in Sustainability

If the requirement is in **bold** it will need to be completed before arrival in order to complete the badge while at camp. Additionally, *requirement 5A* will require a recap family meeting. If possible, we would like to make arrangements to have this meeting via phone or video conference while the scout is at camp.

3 PRE-CAMP WORK

****If you intend to complete the merit badge while at The Justice Scout Camp, this work will need to be completed before arrival.****

Requirement 1A

Before starting work on any other requirements for this merit badge, **write in your own words** the meaning of sustainability. Explain how you think conservation and stewardship of our natural resources relate to sustainability. **Have a family meeting**, and ask family members to write down what they think sustainability means. Be sure to take notes. You will need this information again for requirement 5.

In my words, the meaning of Sustainability:

Explain how conservation & stewardship of natural resources relate to sustainability:

Have a family discussion & have family members write down what they think sustainability means:

Requirement 2 Water A

****Requires one month of implementation****

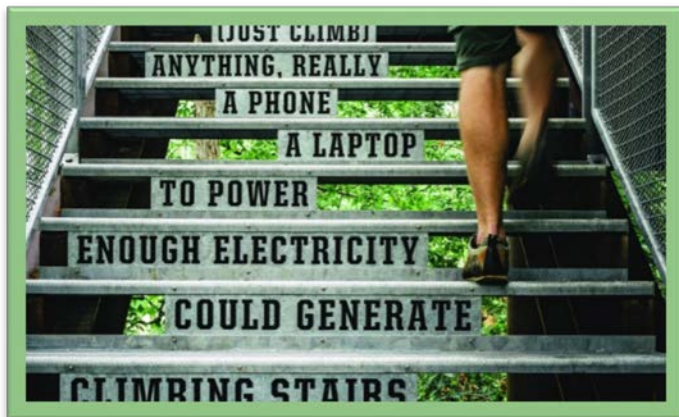
Develop and implement a plan that attempts to reduce your family's water usage. As a family, discuss water usage. To aid in your discussion, if past water bills are available, you may choose to examine a few. As a family, choose three ways to help reduce water consumption. Implement those ideas for one month. Share what you learn with your counselor, and tell how you think your plan affected your family's water usage.

Family Discussion Notes:

Water usage plan (3 ways to reduce consumption):

1. _____
2. _____
3. _____

What was learned:



Requirement 2 Energy B

****Requires 1 Month of Implementation****

Develop and implement a plan that attempts to reduce consumption for one of your family's household utilities. **Examine your family's bills** for that utility reflecting usage for three months (past or current). As a family, **choose three ways** to help reduce consumption and be a better steward of this resource. **Implement those ideas for one month.** Share what you learn with your counselor, and **tell how your plan** affected your family's usage.

Utility usage notes:

Energy consumption plan (3 ways to reduce consumption):

1. _____
2. _____
3. _____

What was learned:



Requirement 2 Food A

****Requires 2-weeks of observation****

Develop and implement a plan that attempts to reduce your household food waste. Establish a baseline and then track and record your results for two weeks. **Report your results to your family and counselor.**

Food Waste Plan:



In order to track your food waste, we recommend starting a compost bin and weighing how much food waste is put in it each day for the two-week period. Be sure to take a baseline measurement before you implement your new plan.

Food Waste Record						
Week 1						
Baseline (before plan)	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
Week 2						
Day 8	Day 9	Day 10	Day 11	Day 12	Day 13	Day 14

Requirement 2 Stuff A

****Requires Two-Weeks of Observation****

Keep a log of the "stuff" your family purchases (excluding food items) for **two weeks**. In your log, categorize each purchase as an essential need (such as soap) or a desirable want (such as a DVD). Share what you learn with your counselor.

"Stuff" Purchase Log		
Start Date _____		End Date _____
Date	Item Description	Want or Need (circle one)



Requirement 4

Explore TWO of the following categories. **Have a discussion with your family** about the **two** you select. In your discussion, include your observations, and best and worst practices. **Share what you learn** with your counselor.

1. **Plastic waste.** Discuss the impact plastic waste has on the environment (land, water, air). Learn about the number system for plastic recyclables, and determine which plastics are more commonly recycled. Find out what the trash vortex is and how it was formed.
2. **Electronic waste.** Choose three electronic devices in your household. Find out the average lifespan of each, what happens to these devices once they pass their useful life, and whether they can be recycled in whole or part. Discuss the impact of electronic waste on the environment.
3. **Food waste.** Learn about the value of composting and how to start a compost pile. Start a compost pile appropriate for your living situation. Tell what can be done with the compost when it is ready for use.
4. **Species decline.** Explain the term species (plant or animal) decline. Discuss the human activities that contribute to species decline, what can be done to help reverse the decline, and its impact on a sustainable environment.
5. **World population.** Learn how the world's population affects the sustainability of Earth. Discuss three human activities that may contribute to putting Earth at risk, now and in the future.
6. **Climate change.** Find a world map that shows the pattern of temperature change for a period of at least 100 years. Share this map with your counselor, and discuss three factors that scientists believe affect the global weather and temperature.

Discussion Topic 1: _____

Discussion Notes:

Discussion Topic 2: _____

Discussion Notes:

4 AT CAMP

While at the Justice Scout Camp, you will work with a Sustainability Interpreter to finish the rest of your requirements. You will have a progress card that you will present to the staff, and they will use that to track your progress on the merit badge. You can show up anytime the program is open to work on the merit badge. The interpreter will teach you the elements of Sustainability through experiential learning while visiting areas of the Summit and demonstrating techniques to minimize impact.

In order to finish up all of the requirements for this badge, while at camp, you will need to have a family meeting and talk about what you have all learned about sustainability. Since most of your family probably won't be at camp, we will use the Summit's technological resources to have a meeting through either a video chat service or phone call. We will have iPads/laptops available and installed with Skype and Facetime. You are welcome to use Facetime or Skype over your own device if you have one available. If all else fails, we can try a call in family meeting or finish up this requirement at home.

Requirement 5A

After completing requirements 1 through 4, have a **family meeting**. Discuss what your family has learned about what it means to be a sustainable citizen. Talk about the behavioral changes and life choices your family can make to live more sustainably. Share what you learn with your counselor.

You can download and create an account with Skype for free here:

www.skype.com

If you have an Apple product and would like to use Facetime you can find more info here:

www.apple.com/ios/facetime/ or www.apple.com/mac/facetime/

Family Meeting Notes:

5 FINISHING UP

Near the end of the week, when you have completed all of the requirements you are able to, you will be able to trade in your progress card for a merit badge application. If you didn't get this worksheet finished, or if you didn't have time to finish everything up at camp, your sustainability Interpreter will give you a partial merit badge application and go over what you need to finish up at home. If you completed all of the requirements, you will not only be well on your way to eagle, but able to lead your generation in a more sustainable lifestyle!