



# **Stewards IN TRAINING**

**SALT SPRING ISLAND CONSERVANCY SCHOOL PROGRAM**

## **Manual**

Writing & compilation  
Sarah Bateman and Catherine McEwen

Review & editing  
Kris Fullbrook, Jean Gelwicks, Tangachee Goebel, Donna McWhirter, Claudia Pickstone,  
Deborah Miller, David Denning

Manual layout & format  
Louise Beinhauer of Word Works

Cover design  
Terry Leonard of Artwerks.

Artwork  
Donald Gunn



January 2009



## Dedication

To all the Stewards in Training program volunteers – for the generous gift of their time and their passion for young learners and the natural world.

## Acknowledgements

Sponsors of the Stewards in Training program through the years include:

Government of British Columbia,  
Nature Canada and Parks Canada – Parks and People Program,  
John Lefebvre, Conservancy major donor to School Program,  
and SSI Conservancy fundraising, including calendar sales.  
Shell Environment Fund,  
TD Friends of the Environment Foundation  
Canadian Wildlife Federation,  
Thrifty Foods Smile Card Program,

Funding for the program manual:

Mountain Equipment Co-op

The Salt Spring Island Conservancy School Committee guides the Stewards in Training program. Members of the School Committee have included:

Jean Gelwicks	Sarah Bateman	Eddie Fishlock	Kris Fullbrook
Tangachee Goebel	C. McEwen	Donna McWhirter	Deborah Miller
Claudia Pickstone	Stella Weinert	Kate Leslie	David Denning
Andrea Leborgne	Ian Mitchell		

## SSI Conservancy Stewards in Training Program

### Purpose

The creation of this manual is meant to fill several purposes: to compile all of the information from past programs, and any future programs; to provide information to volunteers who participate in this program; to provide information to teachers who receive this program; and to provide a template for any groups or organizations wishing to initiate their own stewardship program for students.

Copyright © 2009

Reproduce freely for non-profit educational purposes. Other purposes require written permission.

Copies or more information may be obtained from:

Salt Spring Island Conservancy  
PO Box 722  
Salt Spring Island BC V8K 2W3  
250-537-0318  
[www.saltspringconservancy.ca](http://www.saltspringconservancy.ca)

# SSI Conservancy Stewards in Training Program

## TABLE OF CONTENTS

DEDICATION .....	i
ACKNOWLEDGEMENTS .....	i
PURPOSE .....	ii
OVERVIEW .....	OV-1
PROGRAM OBJECTIVE.....	OV-3
PROGRAM PHILOSOPHY .....	OV-3
WHAT IS STEWARDSHIP? .....	OV-4
PROGRAM DIMENSIONS .....	OV-7
THE STEWARDS IN TRAINING PROGRAM .....	OV-8
IN A NUTSHELL.....	OV-8
FIELD JOURNALS.....	OV-8
VOLUNTEERS .....	OV-8
OVERVIEW OF FIELD PROGRAMS .....	OV-9
PROGRAM A.....	OV-9
PROGRAM B .....	OV-10
ALTERNATE, PAST PROGRAM.....	OV-11
COORDINATOR’S CORNER.....	OV-11
COORDINATOR’S CALENDAR OF TASKS .....	OV-11
Recruiting Volunteers.....	OV-14
ORGANIZING VOLUNTEERS .....	OV-14
Training Day .....	OV-15
Field Day with Volunteers.....	OV-16
Volunteer Appreciation .....	OV-16
Methods for Recruiting New Volunteers .....	OV-16
Criminal Record Checks .....	OV-16
COORDINATOR’S DAILY CHECKLIST FOR FIELD DAYS.....	OV-17

# SSI Conservancy Stewards in Training Program

## FIELD PROGRAMS

### GRADES 2 & 3 – CULTURAL AND NATURAL STEWARDSHIP

<b>COORDINATOR NOTES</b> .....	<b>1-1</b>
Recommended Resource People.....	1-1
Relevant Resources.....	1-1
Pre-Trip Preparation.....	1-1
In the Field.....	1-2
Post-trip.....	1-2
<b>OVERVIEW FOR TEACHERS</b> .....	<b>1-3</b>
<b>DAILY SCHEDULE (SALT SPRING ELEMENTARY)</b> .....	<b>1-5</b>
<b>DAILY SCHEDULE (FERNWOOD &amp; PHOENIX ELEMENTARY)</b> .....	<b>1-6</b>
<b>DAILY SCHEDULE (FULFORD ELEMENTARY)</b> .....	<b>1-7</b>
Information for Group Leaders.....	1-8
<b>STATION SHEETS</b> .....	<b>1-9</b>
FOREST SENSORY SEARCH.....	1-9
CLUES TO BURGOYNE BAY’S PAST.....	1-10
NATURE IDENTIFICATION.....	1-16
NATURE JOURNALS.....	1-20
<b>JOURNAL PAGE</b> .....	<b>1-21</b>
<b>POST TRIP ACTIVITY</b> .....	<b>1-23</b>

### GRADES 2 & 3 – WETLANDS STEWARDSHIP

<b>COORDINATOR NOTES</b> .....	<b>2-1</b>
Recommended Resource People.....	2-1
Pre-trip Preparation.....	2-1
Including Grade 1 Students.....	2-2
In the Field.....	2-2
Post-trip.....	2-3
<b>OVERVIEW FOR TEACHERS</b> .....	<b>2-4</b>
<b>DAILY SCHEDULE</b> .....	<b>2-6</b>
Information for Group Leaders.....	2-7
<b>STATION SHEETS</b> .....	<b>2-8</b>
NATURE JOURNALING.....	2-8
FIRST NATIONS PLANT TECHNOLOGY.....	2-9
POND INVERTEBRATES.....	2-10
SILENT WALK.....	2-11
<b>JOURNAL PAGE</b> .....	<b>2-13</b>
<b>POST TRIP ACTIVITY</b> .....	<b>2-15</b>
<b>ADDITIONAL INFORMATION</b> .....	<b>2-17</b>

# SSI Conservancy Stewards in Training Program

## GRADES 4 & 5 – HISTORY & FOREST STEWARDSHIP

<b>COORDINATOR NOTES</b> .....	<b>3-1</b>
Recommended Resource People.....	3-1
Relevant Resources.....	3-1
Pre-Trip Preparation.....	3-1
In the Field.....	3-1
Post-trip.....	3-2
<b>OVERVIEW FOR TEACHERS</b> .....	<b>3-3</b>
<b>DAILY SCHEDULE</b> .....	<b>3-5</b>
<b>DAILY SCHEDULE (FERNWOOD ELEMENTARY)</b> .....	<b>3-6</b>
Information for Group Leaders.....	3-7
<b>STATION SHEETS</b> .....	<b>3-8</b>
FIRST NATIONS PLANT TECHNOLOGY.....	3-8
MUSEUM.....	3-10
WOOD.....	3-13
HISTORY OF PLACE.....	3-15
<b>JOURNAL PAGE</b> .....	<b>3-19</b>
<b>POST TRIP ACTIVITY</b> .....	<b>3-21</b>
<b>ADDITIONAL INFORMATION</b> .....	<b>3-22</b>
Wood Station – Notes from Forest Geneticist, Dr. Jean Brouard.....	3-22
The Mystery of Cusheon Cove.....	3-25

## GRADES 4 & 5 – MARINE STEWARDSHIP

<b>COORDINATOR NOTES</b> .....	<b>4-1</b>
Recommended Resource People.....	4-1
Relevant Resources.....	4-1
Pre-trip Preparation.....	4-1
In the Field.....	4-1
Post-trip.....	4-2
<b>OVERVIEW FOR TEACHERS</b> .....	<b>4-3</b>
<b>DAILY SCHEDULE (SALT SPRING &amp; FULFORD ELEMENTARY)</b> .....	<b>4-5</b>
<b>DAILY SCHEDULE (FERNWOOD &amp; PHOENIX ELEMENTARY)</b> .....	<b>4-6</b>
Information for Group Leaders.....	4-7
<b>STATION SHEETS</b> .....	<b>4-8</b>
FIRST NATIONS MIDDEN.....	4-8
SEINE NET - LIFE IN THE EELGRASS MEADOW.....	4-10
INTERTIDAL SUBSTRATE STUDY – CLAMMING IT UP.....	4-12
NATURE JOURNALING.....	4-14
<b>JOURNAL PAGE</b> .....	<b>4-15</b>

## SSI Conservancy Stewards in Training Program

POST TRIP ACTIVITY.....	4-17
ADDITIONAL INFORMATION .....	4-18
Reflections on a First Nations Midden, by archaeologist Kim Kornbacher .....	4-18
Bamfield Marine Science Centre Beach Seining Practices .....	4-19

### GRADES 6 & 7 – GARRY OAK ECOSYSTEM STEWARDSHIP

COORDINATOR NOTES.....	5-1
Recommended Resource People .....	5-1
Pre-Trip Preparation.....	5-1
In the Field.....	5-2
Post-trip.....	5-4
OVERVIEW FOR TEACHERS.....	5-5
Plant ID Card .....	5-7
DAILY SCHEDULE .....	5-8
Information For Group Leaders .....	5-9
STATION SHEETS.....	5-10
INVASIVE SPECIES .....	5-10
RESTORATION .....	5-12
WILDLIFE TREES.....	5-16
PLANT IDENTIFICATION .....	5-18
JOURNAL PAGE .....	5-21
POST TRIP ACTIVITY.....	5-23
ACTIVITIES AND ADDITIONAL INFORMATION .....	5-24

### GRADES 6 & 7 – WATER STEWARDSHIP

COORDINATOR NOTES.....	6-1
Recommended Resource People .....	6-1
Relevant Resources .....	6-1
Pre-Trip Preparation.....	6-1
In the Field.....	6-2
Post-trip.....	6-3
OVERVIEW FOR TEACHERS.....	6-4
DAILY SCHEDULE .....	6-6
Information for Group Leaders .....	6-7
STATION SHEETS.....	6-8
CREEK BIOME – <i>BIOME DU RUISSEAU</i> .....	6-8
FOREST/POND BIOME – <i>BIOME DE LA FORÊT ET LA MARE</i> .....	6-10
FOREST/POND BIOME – ALTERNATE PROGRAM .....	6-11
MARSH BIOME – <i>BIOME DU MARÉCAGE</i> .....	6-13
POND BIOME – <i>BIOME DE L'ÉTANG</i> (POND INVERTEBRATE STATION).....	6-15

## SSI Conservancy Stewards in Training Program

JOURNAL PAGE .....	6-17
POST TRIP ACTIVITY.....	6-19
ACTIVITIES AND ADDITIONAL INFORMATION .....	6-21
Notes on Pond Invertebrates .....	6-21
Aquatic Invertebrates Dichotomous Key (compiled by Robert Sharp).....	6-23

### GRADE 8 – PLANET OCEAN STEWARDSHIP

COORDINATOR NOTES.....	7-1
Recommended Resource People.....	7-1
Relevant Resources .....	7-1
Pre-trip Preparation.....	7-1
Post-Trip .....	7-1
OVERVIEW FOR TEACHERS.....	7-2
LETTER TO PARENTS .....	7-3
SESSION 1: WATER AS A SYSTEM .....	7-4
DEFINING WATER QUALITY PARAMETERS .....	7-7
PROTOCOLS FOR WATER QUALITY MEASUREMENTS.....	7-9
SESSION 2: FIELD SAMPLING.....	7-17
SESSION 3: OBSERVATIONS OF MARINE PLANKTON AND FRESHWATER MACRO- INVERTEBRATES .....	7-19
SESSION 4: A SYSTEMATIC VIEW OF PLANET OCEAN.....	7-21
JOURNAL PAGE .....	7-23

### ALTERNATE PAST PROGRAM

#### GRADES 4 & 5 – GARRY OAK ECOSYSTEM STEWARDSHIP

AGE OF YOUNG TREES.....	8-1
Age of Young Tree Student Notes .....	8-1
BURNT TREE.....	8-2
Burnt Tree Student Notes .....	8-2
CAMAS.....	8-3
Camas Student Notes .....	8-3
FIRST NATIONS MIDDEN .....	8-4
First Nations Midden Student Notes.....	8-4
INVERTEBRATES.....	8-4
Invertebrates Student Notes.....	8-5
MOSS .....	8-5
Moss Student Notes.....	8-5

## SSI Conservancy Stewards in Training Program

<b>NURSE LOG .....</b>	<b>8-6</b>
Nurse Log Student Notes .....	8-6
<b>PLANT ID .....</b>	<b>8-7</b>
Plant ID Student Notes.....	8-7
<b>POND STATION.....</b>	<b>8-7</b>
Pond Station Student Notes .....	8-7
<b>SILENT WALK.....</b>	<b>8-8</b>
Silent Walk Student Notes.....	8-8
<b>SOIL .....</b>	<b>8-8</b>
Soils Student Notes .....	8-9
<b>TREE AGING.....</b>	<b>8-10</b>
Tree Aging Student Notes .....	8-10
<b>TREE CIRCUMFERENCE .....</b>	<b>8-11</b>
<b>TREE WIDTH .....</b>	<b>8-11</b>
<b>APPENDICES .....</b>	<b>APP-1</b>
Appendix 1: How to make a field journal.....	APP-3
Appendix 2: Field Preparedness Equipment List.....	APP-4
Appendix 3: Inclement Weather Policy .....	APP-5
Appendix 4: Letter to Teachers .....	APP-6
Appendix 5: Student Permission .....	APP-7
Appendix 6: Student Evaluation.....	APP-8
Appendix 7: Master Equipment List.....	APP-9
Appendix 8: Ducks Unlimited Ford Lake Access Guidelines.....	APP-18
Appendix 9: Government of British Columbia, Ministry of Education’s, Environmental Learning and Experience Policy (2006).....	APP-19