The American Nature Study Society Newsletter

Volume 18, No. 1 Spring 1998

Flo Mauro, Jessica Pierson, Editors c/o Pocono Environmental Education Center; RR 2, Box 1010; Dingmans Ferry, PA 18328 (717) 828-2319

A Celebration of the Life of William L. Sharp Jr.

by Helen Ross Russell

When Bill Sharp, the president of the American Nature Study Society, died of bone cancer in January, family, friends and colleagues in environmental education were saddened and stunned. All of us knew him as a vibrant leader, an organizer, an innovator, and a delightful person who took responsibility seriously without pomposity.

Since 1989, Dr. William Sharp had been coordinator of the educational programs for the Roger Tory Peterson Institute. The institute had been built by Roger near the end of his life as a way to invest his resources and knowledge for future generations. In re-

turning to his birthplace in Jamestown, New York, Roger Tory Peterson selected a site where millions of birds pass through on annual migrations. The buildings he had constructed are state of the art facilities, fully equipped for research and teaching. All that was needed was a program.

The first formal meeting at the Institute was an invitational conference of teachers and leaders in the environmental field held on the last October weekend in 1989. Out of that meeting the National program developed under Bill's leadership.

Bill brought to the position his skills, experiences, and education to meet the challenge. His own formal education was varied: an associate degree in zoology fromOrange County Community College in

Middletown, New York, a bachelors degree in zoology and a Masters degree in teaching biology from Northern Arizona University, and a doctors degree in science and science education from Teachers College, Columbia University. Between his various college stints he taught high school science in Montgomery, and Regents biology at Jamestown. He was an instructor at Teacher's College while he worked on his graduate degree and moved into full time college

teaching, first at the University of Iowa, and then at Clarion University in Pennsylvania. In 1976, he returned to Jamestown as science supervisor, health coordinator and co-director of curriculum for the schools there. In 1980, he became director of adult and continuing education.

What a background for thinking nationally and multigenerationally! His leadership skills were obvious in all that he did. Among his many activities, he was a member of the advisory board of Cornell University Laboratory of Ornithology, a member of the board of directors and secretary of the New York Science

Superviors Association, a board member of the Lucille M. Wright Air Museum, and a member of the Chataugua County STOP-DWI advisory board.

It is not surprising that he was asked to be president of the American Nature Study Society. What is surprising is that he could make time in his busy schedule to plan activities, conduct board meetings, and help with planning our most recent journal, *The Sampler*.

Actually, his involvement in ANSS was another expression of his conviction that to bring about an increase in environmental responsibility we must educate teachers and give them the tools for passing on knowledge.

A scholarship fund has been established at the RTP Institute in

his name. Now topping \$15,000, a committee has been appointed to make decisions on investment for perpetuity of funds and investment in people.

Four generations of his family have lost a beloved member: his mother, his wife and two siblings, three sons, and two grand-daughters. Bill Sharp's heritage will continue through the chain of lives he has touched.



President: Steve Melcher • Corresponding Secretary: Betty McKnight • Recording Secretary: Flo Mauro • Treasurer: Paul Spector • Editor, Nature Study: Janet Hawkes • Directors: Margaret Barker, Sean Duffy, Ken Finch, Bill Hammond, Delmar Janke, Traci Kay, Frank Knight, Kevin Peter, Nancy Peter, Steve Melcher, Laurence Pringle, Helen Ross Russell, John Serrao, Edith Sisson, Sheri Sykes-Soyka.

The Science Times Book of Fish Edited by Nicholas Wade



Do you wonder about the healing ability of catfish slime or why certain species of fish are warm-blooded? With today's technology, many under water areas previously unattainable are being explored, and many new and exciting things are being discovered. The Science Times Book of Fish is a collection of articles taken from the Science Times section of The New York Times that touch on a variety of subjects, from the evolution of fish to the current problems faced



by today's fresh and salt water inhabitants. A special section devoted to "Shellfish and Others" describes the (ing Crab, Giant Squid, and other non-fishy creatures.

The articles are masterfully pulled together in an interesting and informative manner.

The book is accessible to students from middle school through adult. Not

The book is accessible to students from middle school through adult. Not only is it useful as an educational tool, but it is also full of odd and interesting facts that satisfy the cravings of curious people. For fishy information, salty or fresh, prehistoric or current, *The Science Times Book of Fish* is a great place to look.

Published by The Lyons Press, 31 West 21 Street, New York, NY 10010. 231 pages; Hardback \$ 25.00. ISBN 1-55821-604-9

Reviewed by Kristine Massey

The Science Times Book of Birds Edited by Nicholas Wade

As an excited birder, but by no means an expert, I jumped at the chance to review a great new book on birds. *The Science Times Book of Birds* is a compilation of articles from *The New York Times*. By interviewing biologists, archaeologists, and other field researchers, each journalist gathers information into a comprehensible format useful to the average person interested in birds.

The book begins with evolution and ends with the protection of birds; but readers need not read the book from cover to cover. Articles can easily stand alone. Although the format does not include an index for quick referencing, the contents page includes categories and titles that speak volumes about each article. The style makes the book easy to lay down, yet irresistable to pick up again. *The Science Times Book of Birds* is a fascinating collection of recent discoveries and captivating information.

Published by The Lyons Press 31 West 21 Street, New York, New York 10010. 279 pages; Hardback \$25.00 ISBN 1-55821-605-7

Reviewed by Jennifer Naugle

Just Beyond the Classroom by Clifford Knapp

Subtitled "Community Adventures for Interdisciplinary Learning," this book is a treatise on the history, philosophy, and benefits of experiential, cooperative, interdisciplinary, and student-centered outdoor learning.

The book outlines twelve specific outdoor adventure themes that involve classes in outdoor learning. Each theme—local pollution problems, seeing a city block, scouting the school ground, et al—breaks down into five areas: background materials, possible outcomes, possible activities, reflection questions, and performance assessments. The book provides ideas for teachers unfamiliar with these learning and teaching techniques and further exploration for teachers more seasoned in experiential learning.

When considering this book, don't let the publisher fool you. The philosophy and teaching techniques are appropriate for any community, whether urban, suburban, or rural. For teachers interested in providing their young people with the tools for successful living, having the book next to their plan books can be a real asset. In addition, any college or educational institution that does teacher training will find this book an important addition to curriculum centers, reading lists, and libraries.

Pulished by Eric, Clearinghouse on Rural Education and Small Schools, Charleston, WV. 107 pages, eight appendices, a list of references, an index. \$12.00

Leo Verses Scorpio

A Lion is never found in the burning desert A scorpion seldom in a lush green forest So until another lifetime. Or until our signs are changed Dear King of the Jungle I must return to my desert But I have stung you sufficiently To be remembered well I hope my sting of love burns brightly For a Scorpio is always right, A Leo never wrong And somewhere in between these signs There must be A woman for you and a man for me For to you I bring the kiss of death To me you bring a world suppressed Goodby Leo, don't roar so, It's what you really wanted Anyway. . .

Stars of Tomorrow

Someday I shall take you away
To a foreign universe
Amid planets unheard of today-I will hold the stars of tomorrow
In my hand and
Ask you if they're bright enough
To toss upon the blackest night-And what will you answer my love?
Will you hesitate then too,
And let the lights of the world
Burn to ashes in the palm
Of my hand?...

--Adrea Blake, 17

TEACHING TIP

SIZZLIN' IN OUR SOLAR SYSTEM

Jessica Pierson and Mark Russo

Give your students the opportunity to live a day in the milkyway. . .

OBJECTIVE: Using a basketball as the sun to show students our solar system in a human-sized perspective, students will learn interesting facts about each planet while playing a fun game of "Planet Scurry."

AGE LEVEL: 4th, 5th, and 6th grade TIME: 60 minutes

PROCEDURE:

1. SOLAR HIKE

Hike with students from the sun (a basketball) to each of the nine planets (see table below for distances and other substituted objects). As you walk, discuss with students some interesting facts about each planet, or remind them of the interesting facts you may have already discussed with them in class. For instance, scientists believe that Jupiter has no solid surface. It also has the largest storm in recorded history, known as the Great Red Spot, which is 14,000 by 30,000 km, much larger than the earth. Placing facts in perspective with the earth helps them to visualize the solar system and makes it more meaningful to them.

Solar Body	Relative Size	<u>Object</u>	Relative Distance from Sun
Sun	10 in	Basketball	
Mercury	.035 in	Straight pinhead	36 ft, 1.1in
Venus	.087 in	Round pinhead	65 ft, 7.4 in
Earth	.092 in	Round pinhead	88 ft, 7 in
Mars	.049 in	Grain of sand	137 ft, 9.5 in
Jupiter	1.025 in	1-inch diameter bead	469 ft, 1.9 in
Saturn	.862 in	Large marble	839 ft, 10.7 in
Uranus	.368 in	Ball bearing	1,725 ft, 1.6 in
Neptune	.349 in	Ball bearing	2,700 ft, 1.6 in
Pluto	.016 in	Tiny as this period.	3,553 ft, 1.7 in

2. PLANET SCURRY

Set up a playing field by dividing above distances by 50. This will give you a 71 foot area in which to set up and clearly label the planets. Begin the game by describing one of the planets without naming it. Descriptions should start vague and become more specific (This planet is 2,800,000,000 miles away from our sun. . . is currently the farthest planet from the sun). When students think they know the answer, they run to the appropriate planet. You then name the correct planet. Reward students who land on the correct planet with Moon Rocks, Mars bars, Starburst candies, Milkyway candybars, etc. Students who land on incorrect planets become asteroids. Read clues for another planet. Asteroids can tag runners before they reach the correct planet. If tagged, runners also become asteroids. Hoola hoops (optional) laid on the ground can serve as safe places where runners cannot be tagged, but runners must eventually reach a planet. The correct planet is also a safe place. If tagged at a planet, asteroid and runner must remain there until teacher names the correct planet. If planet is incorrect, asteroid has successfully tagged the runner and turned him/her into another asteroid, turning him/herself back into a runner. If planet is correct, the asteroid who tagged the innocent runner must sit out in the hot seat (sun) as a sunspot for one turn, after which they become asteroids again.

RESOURCES

Dixon, Robert T. Dynamic Astronomy, 5th ed. Englewood Cliffs, NJ: Prentice Hall, 1989.

Hatchett, Clint. <u>Planet Watch: A Year-Round Viewing Guide to the Night Sky with a Make-Your-Own Planetfinder</u>. New York: Hyperion, 1993.

Opportunities and Upcoming Events

The Virginia Museum of Natural History in Martinsville, Virginia has many 1998 events scheduled for all ages. Learn about the frontier environments of the Antarctic and Arctic, take Nature Journeys, or sign up to hunt fossils in the coastal plain. Many events are free, and all are welcome. Call or write for specific programs, dates, and other information: Virginia Museum of Natural History, 1001 Douglas Ave. Martinsville, VA 24112. (540) 666-8600.

The Association of Nature Center Administrators (ANCA) Annual Summit will be held in the mountains of Tennessee this August 21-23. The summit will feature field trips in Great Smoky Mountain National Park, a riverboat ride through Knoxville, and southern hospitality! Pre-Sumit workshops begin August 20. Workshop topics includeThe Nature Center Store, Land Management, Eco-travel, and more. ANCA will also conduct a Residential Environmental Learning Center Director's summit at Treehaven in Northern Wisconsin January 27-31, 1999. For more information, contact: Ken Voorhis, Great Smoky Mountains Istitute at Tremont, 9275 Tremont Road, Townsend, TN 37882. Phone: (423) 448-6709; Fax: (423) 448-9250; E-mail: gsmit@igc.apc.org.

Adult Wilderness Expeditions! Join leaders of the Wilderness Awareness School of Duvall, Washington for some basic experiential training for awareness and powerful personal growth experiences. Wilderness expedition programs combine tracking, native skills, and basic and advanced awareness training through ancient teachings styled after many native peoples world-wide. This year's programs include a journey of the Pine Barrens of New Jersey, an exploration of the Language of Birds and Secrets of Invisibility in San Gregorio, California, a Wolf Tracking expedition to the Western Rockies, and many more throughout the country. Write or call the Wilderness Awareness School at: 26331 NE Valley Street, #5-137, P.O. Box 5000, Duvall, WA 98019. (425) 788-1301.

Improve your school science programming! The Midwest Public Garden Collaborative announces the second of three workshops for garden, nature center, and museum educators. The workshop will be held at the Missouri Botanical Garden, St. Louis, Missouri, on October 7-10, 1998. Developed with the support of the National Science Foundation, a series of 12 plant science units for grades K-6 will be introduced to participants. Each unit combines inquiry-based, hands-on investigations in the classroom with a public garden field trip that is integral to the learning sequence. Contact Vanessa Smith, Missouri Botanic Garden, P.O. Box 299, St. Louis, Missouri 63166. (314)577-0226, or e-mail Sandra Rode at srode@ridgway.mobot.org.

Pennsylvania EE Grants!! Financed through receipt from fines for pollution levied by the Pennsylvania Department of Environmental Protection, this grants program offers funding of up to \$10,000 for innovative environmental education in schools and school districts throughout the state. Eligible organizations must specialize in teacher training and be licensed to do business in Pennsylvania. Some matching funds are required. Applications accepted July to November 1998 for 1999 program activities. Contact: DEP Environmental Education Grants Program, P.O. Box 8454, Harrisburg, PA 17105-8454. Phone: (717) 772-1828.

FYI...

To the Young Environmentalist, by journalist Linda Leuzzi features interviews with eight prominent environmental scientists. The book gives teenagers a look at how these archaeologists, anthropologists, botanists, and professors got started on their path. Contact Blue Magruder at Earthwatch at (800) 776-0188 ext. 136 or author Linda Leuzzi at (516) 563-1786.

And the Water's Turned to Blood, by journalist Rodney Barker (Simon and Schuster 1997), reached bookstore shelves justs before the one-cell dinoflagellate Pfiesteria piscicida attracted unprecedented media attention and public concern last summer. In his graphic book, Barker concentrates on the discoveries and frustrations of JoAnn Burkholder, the North Carolina State University aquatic botanist who has long been the keenest and best informed student of the lethal microbe, and has worked hard to warn officials and the public of its dangers.

New Education Book! Totally Tree-mendous Activities, written by Sarah Hollister and illustrated by Anna Dewdney, is a new educational resource for busy teachers and parents that offers fun, creative, easy-to-use tree-based projects for students, grades 3-6. 40 pages of hands-on activities can be copied for indoor or outdoor use. All activities are clearly explained and common materials listed. Learn about tree identification, seasonal changes, research and fieldwork, arts and literature, benefits of trees, and growing a park. Published by NESEA, this affordable book can be purchased at a discount by quantity. For information or to order, call (413) 774-6051, or write to: Northeast Sustainable Energy Association, 50 Miles Street, Greenfield, MA 01301.

Roger Tory Peterson Institute of Natural History offers programs for teachers of early childhood through middle school, as well as workshops in nature journaling, field identification, and nature photography. Working under the philosophy that nature study starts just outside the child's door, the Institute provides its nature education programs to school districts, nature centers, museums, zoos, and other hosting organizations that offer programs for teachers. To inquire about scheduling a teacher workshop, please contact: Roger Tory Peterson Institute Education Department, 311 Curtis Street, Jamestown, NY 14701. Phone: (716) 665-2473; Fax (716) 665-3794; E-mail: bill@rtpi.org.

The Holden Arboretum offers many programs and classes for teachers, families, and individuals in art and nature, gardening, hikes and walks, exploring the natural world, as well as certificate programs and travel opportunities. Find out more! 9500 Sperry Road, Kirtland, OH 44094. (440) 946-4400.

ANSS would like to publish any announcement, issues, teaching tips, etc. that you or your organization would like to send us. Please forward your information to: Flo Mauro, ANSS Newsletter, PEEC, RR #2 Box 1010, Dingmans Ferry, PA 18328.

American Nature Study Society c/o PEEC RR 2, Box 1010 Dingmans Ferry, Pennsylvania 18328

NON-PROFIT ORG. U.S. POSTAGE PAID Dingmans Ferry, PA 18328 Permit No. 1