

**Metropolitan Greenspaces
Education Grant Application Summary Sheet**

Organization: Audubon Society of Portland
Address: 5151 NW Cornell Road
Portland Oregon 97210

Founded: 1902

Contact person: Jennifer Devlin
Chief Ex Officer: Richard Meyer
President of Board: Liz Bryan

Phone: 292-6855
Phone: 292-6855
Phone: 292-6855

Organizational Mission:

The Audubon Society of Portland is a non-profit organization that promotes enjoyment, understanding, and protection of the natural world, particularly native wildlife and its habitat. We also recognize our responsibility to influence decisions affecting wildlife and natural resources. Our interests are worldwide; our focus is on the Pacific Northwest. Our members, volunteers and staff seek to involve the community in these endeavors.

Objectives and description of the project:

The objective of this effort is to extend access to nature to teachers and students in areas identified by the Portland School District as needing special programs such as this. The project will bring a variety of nature experiences to students and bring students into nature. Specifically, 36 fun, hands-on classroom programs and 18 field trips to the greenspace of the teachers choice will be offered in five schools. Additionally, 14 students from Abernathy Environmental School will be trained and teach younger children as Sanctuary Naturalist Guides at the Audubon Sanctuaries. Many current Audubon volunteers will teach in the schools, field and student training sessions.

Partners and their Roles:

Portland Audubon Society - provide class and field experiences, train and support middle schoolers to be leaders of younger children, manage and solicit evaluation of the grant.

Portland Public Schools Administration - identify schools and track progress of students in math and science.

Sabin Elementary, Fernwood Middle, Abernathy Environmental, Irvington Elementary and Beaumont Middle Schools - accept and schedule program awards, choose teachers, students, goals and greenspaces for exploration, evaluate programs.

Abernathy Environmental School - identify and provide individual students who wish to be trained and serve as Sanctuary Naturalist Guides for younger students, schedule transportation with Portland Parks, evaluate program.

Portland Parks and Recreation - provide van transportation for Abernathy students.

Project Period: 18 months

Beginning: January, 1996

Why is this project important?

This project is important in many ways. There are the school curriculum aspects of encouraging math, science and geography skills. There are the important social issues of providing access to nature to those who traditionally cannot afford it. But, moreover, it is to provide students and teachers time in nature to think, explore, be inspired, wish to protect, teach others and appreciate the complexity of ecosystems we take for granted in the urban environment.

Who and how many to be served?

This project intends to serve 18 classes x 25 students per class x (2 hour class program + four hour field trip) = 2700 contact hours. Additionally, approximately 14 Abernathy students will receive 8 hours of training = 112 contact hours. The 14 students will then each teach 10 sessions, two hours each, for 6 younger students = 1680 contact hours. The total hours is 4492. The Metro grant would be spending \$1.75 per contact hour.

Students and teachers will be selected by principals at the following schools: Sabin Elementary, Fernwood Middle, Abernathy Environmental, Irvington Elementary and Beaumont Middle Schools.

Total Project Cost: \$36,270

Total Metro Request = \$7,875

How will Metropolitan Greenspace funds be used?

Metro funds will be used to pay for bus transportation at \$30/hour, gas for van (in-kind), Audubon staff time, planning time (communication with recipient schools), training students to be teachers for younger kids, professional time for program and field trip leaders.

Amount and sources of matching contributions to project:

Audubon Society - \$22405 - in-kind as program development, materials and supplies, training, program presentation, meeting rooms, project oversight and evaluation, enthusiasm, leadership, grant financial management.

Portland Public Schools - \$4540 - in-kind staff time (teachers and principals) for planning, registration program direction and evaluation, and students who will volunteer to teach other kids.

Portland Parks and Recreation - \$1450 - in-kind van use, van scheduling and logistics.

Other funding sources

None.

"Access to Nature"
A grant proposal submitted
by the Audubon Society of Portland

2. ANSWERS TO QUESTIONS

A. Project description, goals, intended results, importance at this time.

The Portland Audubon Society reached over 50,000 people in 1994/95 through classroom education programs, field trips to greenspaces, nature center and trails. Though our colorful, hands-on programs and naturalist-led field trips are very popular, there remain "access poor" segments of the population that, due to lack of funding, knowledge or transportation (or all three) are under represented or denied the delights of hands-on nature learning and explorations of local greenspaces.

The goals of the proposal:

- 1) Provide programs, field trips and transportation to access poor school groups, identified by Portland Public Schools, Science and Math Curriculum Coordinator, Susan Montag.

Description: 18 field trip "packages" will be awarded to five schools targeted by Portland Public Schools district goals to increase participation in math and science. Each package includes two hours of in-class, hands-on preparation chosen by the teacher and/or students from subjects including animal tracking, bird song identification, wetlands, birds, owls, bats, tropical bird migration, ancient forest, research study methods, plant and habitat identification, amphibians, and endangered species. Following classroom programs, the class will embark, with an Audubon Naturalist, on a field trip to a local greenspace (again, site and goals for the day defined by the classroom teacher). Funding for transportation is included.

Schools receiving these packages are as follows:

Irvington Elementary, Pam Shelly, Principal - 4 packages
Fernwood Middle School, Jack Ubick, Principal - 4 packages
Beaumont Middle School, Lynn Smith, Principal - 4 packages
Sabin Elementary School, Michael Jordan, Principal - 4 packages
Abernathy Environmental School, Sarah Taylor, Principal - 2 packages

Since many of our communities urban greenspaces are newly designated, many people don't know what resources they offer or how to reach them. PAS and the local neighborhood youth reached in this program will help spread the word.

- 2) Provide additional van transportation and naturalist training to Abernathy Environmental Middle School, at the special request of this pilot school.

Description: Abernathy Environmental School is in its first year of operation. The Education Committee of the Portland Audubon Society is committed to supporting this new environmental school. The school administration's goals for students include offering opportunities for student service projects and mentoring younger students. The school would like to bring their higher achieving eighth grade students to the Portland Audubon Society to be trained as sanctuary tour guide naturalists. Unfortunately, our site is not reachable by public transportation. Help now in their first year would be most useful to them.

These goals will be accomplished, in part, by connecting the teacher to Portland Parks and Recreation's Urban Environmental Education Coordinator, David Yamashita. The city recently purchased a van for use environmental education uses. The teacher (or Americorp volunteer - Abernathy currently has the assistance of several qualified Americorp volunteers) would then transport students to the Audubon Society on NW Cornell Road. The students will be trained in our volunteer training program, as we host other volunteers and interns in a similar roles (see attached "Sanctuary Tour Guide Training Manual"). Typically, sanctuary tour naturalists are in the ninth grade or older, but this year we have already had success with one eighth grade individual and are excited to support more students in this rewarding endeavor.

B. How will the goals be accomplished? Success and effectiveness measures. Experience as an EE provider. Relate to mission and goals.

Because the Portland Audubon Society already has a successful education program, many of the components needed to meet this grant proposal are already in place. For example, we currently have eleven travelling programs (development and production previously funded for approximately \$14,000), a volunteer staff of ten individuals who act as receptionists, an urban natural areas tours program, staff to coordinate the grant and register grant recipients for programs, trained volunteers and staff to present programs and staff and volunteer sanctuary tour guides to train Abernathy students. After meeting with selected school personnel, the project will be a matter of developing site specific materials (new materials development is done with current interns), registering groups for programs and field trips and training and scheduling Abernathy students.

This project clearly contains the fun and community involvement outlined in our mission statement :

The Audubon Society of Portland is a non-profit organization that promotes enjoyment, understanding, and protection of the natural world, particularly native wildlife and its habitat. We also recognize our responsibility to influence decisions affecting wildlife and natural resources. Our interests are worldwide; our focus is on the Pacific Northwest. Our members, volunteers and staff seek to involve the community in these endeavors.

Environmental education is a top priority and organization commitment at the Portland Audubon Society since 1902! Each year, thousands of school children from the Portland area visit our wildlife sanctuary. Many of them are on the first hike of their life. And what a first hike! Students hold rough-skinned newts, poke their noses in a woodpecker holes, find places bats call home, touch pond scum, examine a mole's fingernails with magnifying glasses and meet our resident barn owl, who, along with other animals being cared for in our Wildlife Care Center, tell the stories of human interaction with wildlife. Teachers bring their students back year after year.

In addition to teaching students at our facility, our huge team of volunteers is out in the community presenting hands-on programs for schools, garden clubs, colleges, youth groups and church groups (see enclosed brochure). We also offer field trips to neighborhood natural areas, encouraging local people to explore and care for "their" greenspaces. Audubon has been especially interested in seeing that information on local natural areas is available in low to middle income areas of town (see enclosed pamphlet "North Portland Naturally"). Activities such as our Forest Park Mural Project and Greencity Data Project (see attached news articles) help encourage community interest in environmental education and conservation.

Effectiveness can be measured in terms of numbers served and dollars spent per contact hour. This project intends to serve 18 classes x 25 students per class x (2 hour class program + four hour field trip) = 2700 contact hours. Additionally, approximately 14 Abernathy students will receive 8 hours of training = 112 contact hours. The 14 students will then each teach 10 sessions, two hours each, for 6 younger students = 1680 contact hours. The total hours is 4492. The Metro grant would be spending \$1.75 per contact hour. I wish that fun, adventure, personal growth and commitment to the environment were as easily quantified.

C. How is the project transferable to other educators? Long term benefits. Sustainability.

Four of the five schools selected are feeder schools to Grant High School. Grant has been involved in a program called Greencity Data for several years. It is the intention of the Portland Public Schools that children be prepared for this higher level field experience in the future and that this program will fill that need. Also, Abernathy is a current participant in Geencity Data. Their training and community service work should nicely compliment their data collecting activities.

Because of the design of this proposal, teachers pick the topics and greenspace of their choice. We have found that "knowing" an area encourages return and stewardship.

The Abernathy students selected to become sanctuary tour naturalists are taking their first steps toward further community involvement such as Outdoor School Junior Counselors, tour leaders, public speakers, becoming responsible citizens and public leaders.

By providing access to exciting programs and grant funding, relationships are forged and further projects generated. For example, Sarah Taylor of Abernathy "tweaked" this proposal to achieve her specific goals. It is our hope that other individuals in under-served areas will feel this comfortable, directing environmental education providers to support their needs.

We currently have internships, classroom and special programs, and community event opportunities with groups, many of whose initial contact with our nature classes was via grant funding. Many groups continue their projects without us or find creative funding sources to continue registering for our services.

Attachment A.

WORK PLAN

| <u>Task</u> | <u>Date</u> |
|--|--|
| Meet with principals and teachers at recipient schools | January, 1996 |
| Meet with Portland Parks and Abernathy representatives | January, 1996 |
| Train Audubon Naturalist Volunteers | Ongoing |
| Register and deliver class and field programs | January 1996 - June 1997 (summer school O.K.) |
| Meet and train student naturalist tour guides from Abernathy | March 1996 |
| Abernathy students teach younger students | April - May 1996 |
| Final report to Metro | When all packages have been delivered (before June 1997) |

Attachment B**Staff/Volunteers Qualifications/Roles**

Jennifer Devlin

Director of Education, Portland Audubon Society, project oversight, program delivery

Pam Shelly

Principal, Irvington Elementary, program award to appropriate teacher(s)

Jack Ubick

Principal, Fernwood Middle School, program award to appropriate teacher(s)

Lynn Smith

Principal, Beaumont Middle School, program award to appropriate teacher(s)

Michael Jordan

Principal, Sabin Elementary School, program award to appropriate teacher(s)

Sarah Taylor

Principal, Abernathy Environmental School, program awards distribution, identification of students and leader for Sanctuary Naturalist Tour Guides, communicate regarding van scheduling

David Yamashita

Urban Environmental Educator, City of Portland, Parks and Recreation, provide van transportation and scheduling

Elianne Lieberman

Environmental Educator, Audubon Society of Portland, program registration and student volunteer scheduling

Kim Wilson

Environmental Educator, Audubon Society of Portland, program and field trip presentation and coordination, student volunteer training

Portland Public School Teachers, choose and schedule programs that augment curriculum goals.

Candice Guth

Finance Director, Audubon Society of Portland, grant financial management

Brian Ledford, Tom Rapp, Cerissa Linder, Jamie Capp

Interns, Audubon Society of Portland, program materials development

George Baetjer, Luanne Bye and others

Volunteers, Audubon Society of Portland, present classroom programs and field trips.

Attachment C**Budget**

| Budget item | Request of Metro | Audubon In-kind | Portland Parks In-Kind | Portland Schools In-kind |
|--|-----------------------------|-------------------------------------|------------------------|--------------------------|
| Project Planning | \$ 500 (staff) | \$ 500 (staff) \$ 95 (volunteer) | \$ 150 | \$ 400 |
| Program Scheduling | | \$ 500 (staff) | \$ 50 | \$ 720 |
| Materials development | \$ 500 (site specific info) | \$500 (staff) \$ 95 (vols) | | |
| Field Equipment | \$ 500 | \$4000 | | |
| Program development | | \$14,000 (staff, supplies, vols) | | |
| 36 in-class programs | \$1620 | \$ 250(vols) | | |
| 18 field trips | \$2160 | \$1000(staff) \$ 350(vols) | | |
| 18 bus rides for field trips | \$2160 | | | |
| 10 days van and gas for Abernathy | \$ 75(gas) | | \$1250 | |
| 2 days training for Abernathy students | \$360 (staff) | \$115 (vols) | | \$ 570 |
| Students teaching students | | | | \$2850 |
| Grant Accounting | | \$1000 (staff) | | |
| TOTALS | \$7875 | \$22405 | \$1450 | \$4540 |

Total project = \$36,270

Total Metro Request = \$7,875

Attachment C revised REVISED Budget January 2, 1996

| Budget item | Request of Metro | Audubon In-kind | Portland Parks In-Kind | Portland Schools In-kind |
|--|------------------|-------------------------------------|------------------------|--------------------------|
| Project Planning | | \$ 100 (staff) \$ 95 (volunteer) | \$ 150 | \$ 100 |
| Program Scheduling | | \$ 100 (staff) | \$ 50 | \$ 120 |
| | | | | |
| Program development | | \$10,000 (staff, supplies, vols) | | |
| 16 in-class programs | \$ 720 | \$ 100(vols) | | |
| | | | | |
| | | | | |
| 10 days van and gas for Abernathy | \$ 75(gas) | | \$1250 | |
| 2 days training for Abernathy students | \$ 200 (staff) | \$ 275 (vols) | | \$ 570 |
| Students teaching students | | | | \$2850 |
| Grant Accounting | | \$1000 (staff) | | |
| TOTALS | \$ 995 | \$11670 | \$1450 | \$3640 |

Total project = \$17755

Total Metro award = \$ 995

Metropolitan Greenspaces Education Grant Application Financial Fact Sheet

Information About Applicant Organization

Tax-exempt status (If exempt under another organization, send evidence from IRS of that exemption and explain the relationship between the exempt organization and the applicant organization.) Check one:

☐ Government agency

☒ 501 (c)(3) Organization name on IRS letter Audubon Society of Portland

☐ Other (explain) _____ Is tax exempt status currently valid? yes

Organization financial information (Do not include in-kind contributions.)

Ending date of fiscal year June 30

Applicant's total budget for current fiscal year: Income \$967,603 Expenditures \$978,376 *
* Includes \$35,000 depreciation.

Major sources of support (and amounts):

Already committed: Grants - \$70,000 Class Fees - \$40,000
Nature Store & Published Books - \$42,000
Individual Donations - \$35,000 Membership Dues - \$25,000
Special Events - \$6,000

Expected: Grants - \$160,000 Class Fees - \$90,000
Nature Store & Published Books - \$82,000
Individual Donations - \$75,000 Membership Dues - \$60,000
Special Events - \$35,000

Budget for specific department or program involved in project:

Income \$189,835 Expenditures \$157,998 (Does not cover overhead)

Major sources of support (and amounts):

Grants \$64,000
Class Fees \$119,000
Individual Donations \$7,000

If a grant is awarded, what is the official name of the organization with whom Metro will contract and to which checks should be paid, if different from above?

Same as above.

I certify that the above information is correct and that I am authorized by the governing board of this organization to submit this grant application to the Metropolitan Greenspaces Program.

Signature of Chief Executive Officer:

Signature: _____

Date: October 30, 1995

Name: _____

Richard Mayer

Title: _____

Executive Director

FOR OFFICE USE ONLY

____ Proof of 501(c)3 and IRS letter
____ Narrative response
____ Qualifications of key individuals

____ Two (2) letters of cooperation
____ Project Budget
____ Work plan and schedule



PORTLAND PUBLIC SCHOOLS

1320 Northeast Brazee / Portland, Oregon 97212

Phone: (503) 280-6185

IRVINGTON SCHOOL

Office Of The Principal

October 26, 1995

Jennifer Devlin
Audubon Society
5151 N.W. Cornell Road
Portland, Oregon 97210

Dear Ms. Devlin:

Thank you for including us in your Access to Nature grant! Science and mathematics are our top priority here at Irvington this year. We have been researching and following our urban students (particularly our minority children) as they flow through science programs at the middle and high school levels. We find that we need to assist our students in learning more science at earlier ages, and structuring activities that help children see themselves as "scientists". We know that this knowledge and self-esteem will serve them well in becoming excellent science students, and, later on, taking on careers in science in greater numbers.

Our shared mission at Irvington speaks to the need for learning for young children that is experiential. The classroom traveling programs and the field experiences fit beautifully into "hands on" learning; this also helps children understand how science concepts are related very directly to "real life scenarios".

We would willingly accept the additional resources this grant would bring to our teaching staff, as well as the possibilities for collaboration, and the preparation for further biological field studies it would bring to our students. Count us in!

Sincerely,

Pamela Shelly
Principal

IRVINGTON ELEMENTARY SCHOOL MISSION STATEMENT

As educators we are committed to preparing children for tomorrow's world. In order to fulfill this commitment, we will employ instructional strategies incorporating teaching that is experiential and process oriented, teaching that includes teamwork and cooperation, and teaching that integrates basic skills and content area curricula.

We will encourage students to be problem solvers both in their relationships with others and in their approach to learning.

We will model an understanding and appreciation of cultural diversity, open-mindedness, and we will embrace lifelong learning. Our classrooms will reflect these values.

We will strive to accurately communicate with students, families and colleagues. We will be open to involving the community in the school and the school in the community.

We will value, empower, and celebrate children.



PORTLAND PUBLIC SCHOOLS

4013 Northeast 18th Avenue / Portland, Oregon 97212

Phone: (503) 280-6181

SABIN EARLY CHILDHOOD EDUCATION CENTER

Office of The Principal

October 25, 1995

Jennifer Devlin
Audubon Society
5151 NW Cornell Road
Portland, Oregon 97210

Dear Jennifer,

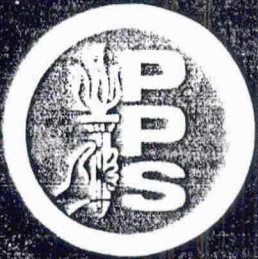
Sabin School would like to be a recipient school for the access to Nature Grant you are applying for. We believe this resource would aid our efforts in the areas of science and environmental studies. We have four teachers who are willing to place emphasis on green space and nature environments that our community supports.

Thanks for your help.

Sincerely,



Michael Jordan
Principal



PORTLAND PUBLIC SCHOOLS

1915 Northeast 33rd Avenue Portland, Oregon 97212

Phone: (503) 280-6480

FERNWOOD MIDDLE SCHOOL

Office Of The Principal

October 30, 1995

Ms. Jennifer Devlin
Audubon Society
5151 N.W. Cornell Road
Portland, Oregon 97210

Dear Ms. Devlin:

We were thrilled to learn that Fernwood Middle School has been nominated to receive access to the nature grant that will allow us to expand our environmental education efforts. It is because of the generosity of organizations such as yours, that we can expand the environmental awareness of our students and we are most appreciative.

Please contact us immediately if there is anything else that we need to do to insure compliance with grant guidelines.

Sincerely,

John F. Ubik, Jr., Principal
Fernwood Middle School

JFU/lo

PORTLAND PARKS AND RECREATION



1120 SW FIFTH AVE, SUITE 1302, PORTLAND, OREGON 97204-1933

TELEPHONE (503) 823-2223

FACSIMILE (503) 823-5297



CHARLIE HALES, COMMISSIONER

CHARLES JORDAN, DIRECTOR

30 October 1995

Ms. Jennifer Devlin
Portland Audubon Society
5151 NW Cornell Rd.
Portland, OR 97210

Dear Jennifer:

Portland Parks and Recreation is pleased to be a partner with Portland Audubon and the Abernethy Environmental Middle School for the *Access to Nature Program*. We would be willing to donate the use of our 15 passenger "eco-van" for the field trips to Portland Audubon. As you know, Portland Parks is very interested in increasing awareness of the environment among urban residents and this program is certainly a step in that direction. We are excited about being a part of this project.

Sincerely,

David M. Yamashita
Urban Environmental Education Coordinator

P.O. Box 21224, Seattle, WA 98111

Portland Audubon Society
Attn: Al Miller
5151 N.W. Cornell Road
Portland, OR 97210

Charlene F. Demary
(206) 442-5130
EP/EO:TS:CFD

JAN 19 1976

Gentlemen:

This is in answer to your telephone request of January 12, 1976.

We regret that we do not have a copy of the original exemption letter issued to you.

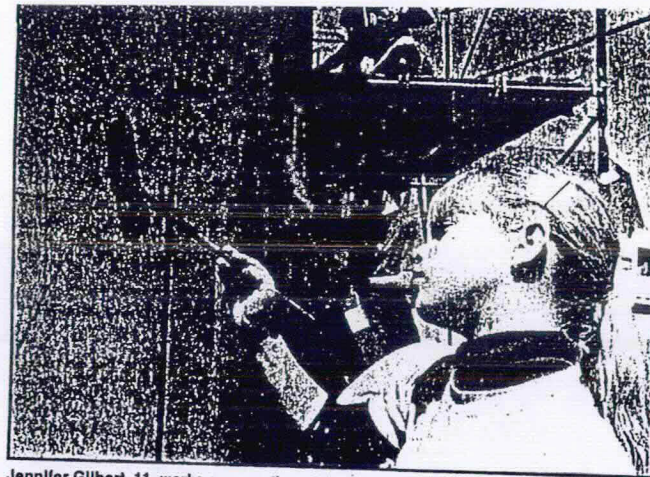
Records of this office, however, disclose that you were granted exemption from Federal income taxes December 1, 1947, under the present section 501(c)(3) of the Internal Revenue Code of 1954.

Based on the information you submitted October 19, 1970, you were classified as an organization that was not a private foundation as defined in section 509(a)(1) of the Internal Revenue Code.

This letter should be retained in your permanent files and photocopies only distributed.

Very truly yours,

Ralph S. Busacker
Chief, Technical Staff
Employee Plans and Exempt
Organizations Division



Jennifer Gilbert, 11, works on a section of the mural taking shape, below.

Youths' mural takes form on Northwest Portland wall

By SUZANNE RICHARDS
of The Oregonian staff

A red-tail hawk flies over a waterfall, deer graze, and a squirrel scampers across the ground in the mural emerging this week on a 60-foot-long wall in Northwest Portland.

While a 10-year-old sketches maldentail fern, another youthful artist focuses his attention on a bird, working slowly to get the tilt of the head just right. Still others paint trees, water and sky in this celebration of the habitat and wildlife of Forest Park.

Nine-year-old Maggie Goodman, one of a dozen young artists painting the mural on the side of the Food Front Cooperative Grocery at 2375 N.W. Thurman St., says she is excited about being a part of the project because, "It's open and public and not like a little thing."

"And everyone will get to see it," added Pat Sullivan, 11, of Redmond, Wash.

The Forest Wildlife Mural Project is a cooperative effort of the Audubon Society of Portland, the extension department of the Pacific Northwest College of Art, and the Food Front Cooperative, which donated the wall space for the painting.

Artist-teacher Lynn Takata, who directed many similar public mural projects in Chicago before moving to Portland two years ago, is guiding the class of 9- to 13-year-olds in their art work. It was her idea to approach the Audubon Society for the joint venture.

"It was the perfect excuse for an art class

to spend time with a naturalist," said Takata.

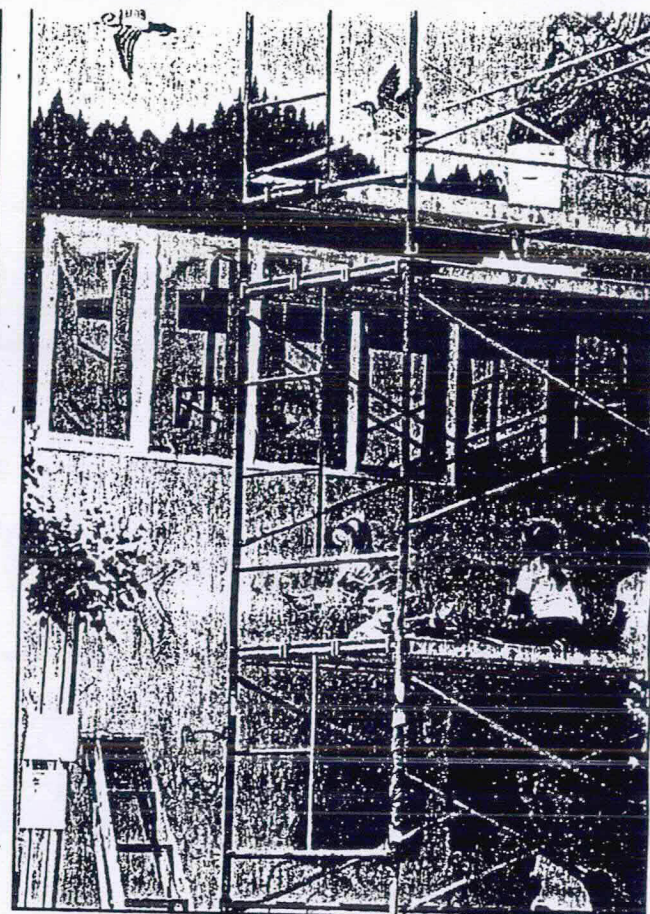
"To me it is what education should be. It involves public education, design and teaching. It is great when you can work in both art and community participation."

The community part comes from volunteers who have painted some of the upper part of the 22-foot high wall so that the youngsters will not have to work on the highest platform of the scaffolding. It also involves what Food Front marketing director Greg Swetland feels about the project.

"We are seen as a gateway to one of the entrances to Forest Park," explained Swetland. "So when I heard about the project, I went to them and offered our wall. It fits in with our philosophy. As a natural food store, an important part of what we are is an educational institution, and that is the way we want to relate to the community."

Jennifer Devlin, Audubon education director, is equally enthusiastic about the program. "We were looking for ways to draw public attention to urban wildlife areas, not only because they are an excellent habitat for animals, but a nice place for people to hang out, too. There are a lot of wonderful things to do in a forest."

She said she hoped that a series of mural projects in strategic areas around the city near wildlife habitats could be worked out in successive summer programs. "I'd like to continue next year doing one near Smith-Bybee Lakes in North Portland and Oaks Bot-



ERIN N. CALMES

Artists will continue working through next week. Dedication will be at 2 p.m. July 19.

tom in Southeast Portland," Devlin said.

The murals, she explained, draw attention to the city's remaining urban green spaces and call attention to the need to preserve them.

Students spend a part of each day in the woods studying the animals, bird-watching, visiting the wildlife care center and sketching what they see. One morning, they attended a taxidermy class to help them understand the anatomy and muscular structure of birds, allowing them to transfer this knowledge to their own artwork, Devlin explained.

"It felt really good to draw things from real life," declared Olivia Butler, 11. "I'm not exactly used to going to the forest and

drawing something."

Emily Anderson, 10, who was sketching a deer on the wall, said, "It's neat because you get to draw pretty much any animal in the forest."

Beyond their own pleasure in the class, the youngsters have already absorbed the broader scope of the project.

Maggie Goodman said, "The purpose is to make people know the Audubon Society isn't just birds and that we have to try to save what we have, like the forest. I thought I'd just be painting, but this is much better. I've learned a lot of nature stuff."

Cathi Butts, 10, said she had taken many classes and liked all kinds of art, but this was her first mural.

Teens got more than they planned with nature trail

□ Pair designed trail in Fairview Woods as community project

by SHARON NESBIT
of The Outlook staff

FAIRVIEW — It was supposed to be 10 hours of community service. But two Reynolds high juniors who set out to plan a little nature trail in a patch of woodland behind an apartment complex quit counting at 50 hours each.

"But we learned a ton of stuff," said Joseph Chung, gloved hands resting on a post-hole digger.

Though Chung and Jon Fritz, both 16, are still not done with their planned trail in an 8-acre woodland/wetland between Halsey and Bridge streets, they can see the light at the end of the path. A Nov. 3 dedication will mark the completion of the 3,000-foot route with interpretive signs, a wildlife watching blind, a partial boardwalk and a host of natural wonders ranging from a huge Douglas fir to a fallen nurse log.

The site, 8 acres plus a wetland, was a designated natural area on Fairview's comprehensive plan. Described as one of the largest stands of timber of its age in East Multnomah County, it was given for public use by Jim Winkler of Winkler Development Corp. Winkler, whose firm built the Fairview Woods apartment complex for the Housing Authority of Portland and is constructing an adjacent subdivision, paid for about \$20,000 in costs materials to develop the site and brought the Green City Data Project into the act. The latter group involves teams of middle and high school students in hands-on projects in natural areas.

Among the people getting pairs on the back at the dedication will be the

two teen-agers who first wandered in with pink flagging tape and the naive belief that their project would be a mere walk in the woods.

"We flagged the trail three or four times," explained Fritz. "Every time we had it done, someone would look at it and give us some ideas and we'd have to do it again."

The pitfalls of wheelchair access, grade and too-tight loops that tempt people to cut the trail were pointed out, causing Fritz and Chung to return to trail-blazing chores again and again. They began last March, spent a good chunk of their summer on the job and will see the work done in early winter.

The project, which began in Larry Callister's environmental science class, stretched to include surveying, natural history, English and math skills and some psychology.

For instance, Fritz points out, interpretive signs, panels and a brochure are designed to give residents a sense of ownership with the hope of decreasing vandalism. Vandalism was painful to developers, points out Shawn Sullivan, project manager. During construction of the apartment complex, vandals did almost \$15,000 in damage to the new buildings.

"That is so disappointing," said Sullivan who sees the Fairview Woods natural site as a real community asset. He hopes that elementary school students will walk the path from Bridge Street to study the area and that scout troops will visit and cook a meal at a rock fire pit prepared for that purpose.

Fairview Woods was developed through team work. Green City Data was joined by the U.S. Forest Service, Reynolds students and several AmeriCorps teams.

Some of Callister's classes come to the site to hack away at Scotch Broom or pull English ivy.

"We're going to have an interpre-



STEVE KASSERMAN/The Outlook

Jon Fritz and Joseph Chung, Reynolds High Juniors, turned out to be trail blazers when they designed a nature trail in Fairview Woods.

tive panel on invasive plants, too," Chung notes.

The AmeriCorps crews are building and graveling the trail. The two students wrote the first drafts for the interpretive panels which Mike

Carlson of Community Stewards will polish into final prose.

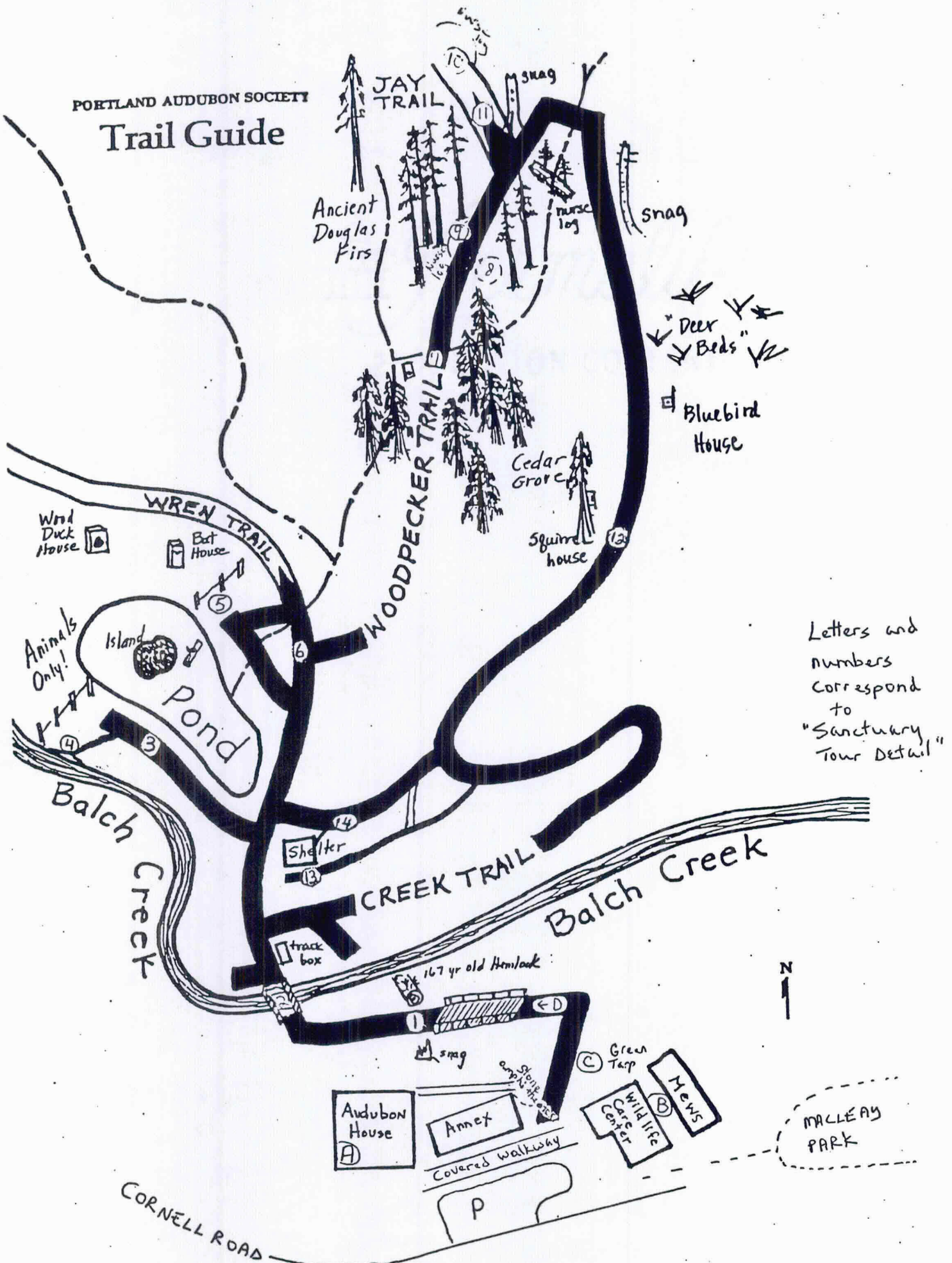
Despite their repeated treks through the woods, Chung and Fritz marvel at the small wonders along the path they chose. The trail veers off to

show a fallen nurse log and its family of new plants. They point out a huge Douglas fir stand of cedars, some that once had railroad spikes driven in them. They note a trunk pitted with woodpecker holes. Their chosen path

also passes boulders deposited by the Missoula Flood in the last ice age.

"There's a lot of cool stuff here," Fritz says. The trail he and Chung designed will help others find it.

PORTLAND AUDUBON SOCIETY
Trail Guide



GOALS OF THE SANCTUARY TOUR

We want participants to:

- Have fun
- Explore
- See how we treat nature respectfully and do the same
- Recognize different habitats
- Recognize different animals and their signs
- Become aware that humans have an impact on animals and their habitats

As Sanctuary Tour Leaders we provide:

- A model for behavior
- Opportunities for exploration
- Safety

Sanctuary Tour Outline

A 2-hour tour.

| <u>Time:minutes</u> | <u>Description of Activities</u> |
|---------------------|----------------------------------|
|---------------------|----------------------------------|

- | | |
|----|---|
| 10 | <u>Intro:</u> Bat Roost (or under breezeway) Greeting, tour overview, behavior/rules. Divide into rotation groups. |
|----|---|

ROTATION:

- | | |
|----|---|
| 16 | A) <u>Bat Roost:</u> Bird songs, nests, viewing. |
| 16 | B) <u>Wildlife Care Center:</u> Free time exploration; baby bird demo. |
| 16 | C) <u>Green Tarp Area:</u> Animals and their signs. |
| 60 | D) <u>Sanctuary Hike:</u> Habitats, animals, animal signs. |
| 5 | Walk from green tarp area to pond |
| 10 | Pond |
| 10 | Stream |
| 5 | Bats |
| 30 | Woodpecker Trail walk |
| 2 | <u>Conclusion and Wrap-up:</u> Review and sharing. |

A 1-1/2 hour tour with 4 groups.

| <u>Time:minutes</u> | <u>Description of Activities</u> |
|---------------------|----------------------------------|
|---------------------|----------------------------------|

- | | |
|----|---|
| 10 | <u>Intro:</u> Bat Roost (or under breezeway) |
|----|---|

Rotation:

- | | |
|----|--|
| 11 | A) <u>Bat Roost:</u> Bird songs, nests. |
| 11 | B) <u>Wildlife Care Center:</u> Free time exploration. |
| 11 | C) <u>Green tarp area:</u> Hand out animals and signs together. |
| 45 | D) <u>Sanctuary Hike:</u> No stream, no bats. |
| 2 | <u>Conclusion and Wrap-up</u> |

A 1-1/2 hour tour with 3 groups.

| <u>Time:minutes</u> | <u>Description of Activities</u> |
|---------------------|----------------------------------|
|---------------------|----------------------------------|

- | | |
|---|---|
| 8 | <u>Intro:</u> Bat Roost (or under breezeway) |
|---|---|

Rotation:

- | | |
|----|--|
| 15 | <u>Wildlife Care Center:</u> Free time exploration; baby bird demo. |
| 15 | <u>Green Tarp Area:</u> Animals and their signs. |
| 50 | <u>Sanctuary Hike:</u> No stream. |
| 2 | <u>Conclusion and Wrap-up</u> |

Sanctuary Tour Detail

Time:minutes

Description of Activities

10 Intro: Basement Classroom (Bat Roost) (or under breezeway)

1. Greeting:

- Welcome to Portland Audubon Society (PAS). Introduce yourself and other volunteers.
- Explain PAS is a group that studies and works to protect wild animals and their habitat.

A habitat is the place where a plant or animal lives. It has the four things that are needed for survival: food, water, shelter and space.

2. Tour Overview:

- Today we will be exploring the wildlife sanctuary. Sanctuary means safe place. So, a wildlife sanctuary is a safe place for wildlife. When we are in the sanctuary we can't do anything to hurt the animals, the food they eat, or the places they find shelter. There's no hunting, littering, fires, dogs or cats, cutting trees or picking plants. We leave everything where we find it.

- In the sanctuary we will be exploring different habitats: a stream, a pond, an ancient forest, dead trees, and other places where animals live. We'll look for the animals that live in these habitats and we'll look at the clues the animals leave behind. We'll also be visiting the Wildlife Care Center where injured wildlife are cared for until they can be released back to the wild. Although the Sanctuary may look different from where you live, we are connected to the plants and animals that live here. The water in the stream is affected by what we do around our homes, and, how clean the water is affects the water we drink and the fish we eat. Trees keep us cool, provide oxygen, and give us a place to come and refresh ourselves.

3. Behavior/Rules: "What do you think are some good rules to follow when you are in the sanctuary?" Walk, stay on the trails, leave everything where you find it, don't pick plants, be quiet, listen, stay with your group.

4. Divide into groups.

16 A) Bat Roost: Bird studies - THESE ACTIVITIES CAN BE DONE IN ANY ORDER AND SOME CAN BE OMITTED:

1. Bird songs. HAVE STUDENTS SIT IN A CIRCLE. Insist on a circle so all can see each bird.

"One clue to an animal's presence is sound, either from the animal moving or from its call. One of the most common sounds we'll hear in the sanctuary are bird songs. Often we will hear the birds without ever seeing them. We are now going to listen to the songs of four birds that live in the sanctuary, some which I think you already know."

Take out bird cards and tell kids that each will be holding a bird. Identify birds, give a hint about its call or song and hand to kids who volunteer for that bird. Tell kids that songs will play twice through, in a different order the second time. Turn on tape. While kids listen to first tape section (until bell), tell them what bird is singing and have them hold up corresponding bird. Then listen to second section (same songs, different order), and have kids hold up birds again. Help them if they don't remember.

Why do birds have songs and calls? Territory, attracting and courting mates, warning, keeping

together.

2. Nests. Set up a **PASSING CIRCLE**, having participants working in pairs. "Another clue to an animal's presence is their den or nest." Tell kids that you have lots of nests and that each kind of bird (species) makes a different kind of nest. Their job is to figure out what materials each nest is made out of and what kind of habitat has this material. Swamps, forests, etc. Are there any man-made materials? hand out one nest to each pair.

3. Upstairs Windows. "We are going to take a close-up look at some of the birds that live in a forest habitat." Model moving slowly and staying low while you look for birds. When kids realize how they must move say "Creep" (not "go" as they tend to forget everything). Suggest that kids use bird picture sheets to identify.

I need everyone on their best behavior, because we now get to visit the Wildlife Care Center.

16 B) Wildlife Care Center: Wildlife Rehabilitation.

Go to the **SIDE** of the Care Center. Stress quiet, that there are injured animals inside. "All the animals in here have been hurt because in some way humans have interacted with them. The animals may have been shot, hit by a car, flown into a window, injured by a pet, picked up and taken away from its parents, or had their habitat destroyed." Continue to give directions at the side of the Care Center or have students take a seat on the benches in the courtyard. Stress that things are going to be very exciting, but if they want **FREE TIME**, they will follow directions.

1. Care Center free time exploration. Point out places kids can look during free time (Syd's cage, the Acorn Woodpecker's cage, Dots and Lucy, EACH set of stairs at the windows and Owen.) If lots of kids are looking at one place, should YOU go there? NO, go somewhere else and then come back. When you say "Explore" the kids will have free time to slowly move around to all the places that you point out: **MODEL SLOW MOVEMENTS**. Ask students to read the signs by each cage before asking you questions about the animals. If the group does not read have the adults work with the students. Say "EXPLORE". (Don't say "GO".)

2. Mews. You can meet on the benches to answer any questions. Point to mews and stress the need to keep the animal **WILD** in the rehabilitation process. Only the folks taking care of the animals get to go to the mews, and only when they are feeding the animals or cleaning the cages.

Walk to stone amphitheater and sit on stones or, if raining, go to covered walkway and be seated on benches.

3. Baby Bird DEMO (Nest Activity box). Ask for a kid who can be a volunteer. Bring them to the front of the group and have them stand facing the group with their arms outstretched. They are a tree. As you place the nest (with little bird) in one of their hands, lead the group with:

"In the spring birds build a (pause so group can answer)...NEST. Then they lay their ... EGGS. The eggs then ... HATCH! Baby birds are fed by parents until they are old enough to learn to ... FLY! But do baby birds know how to fly? No! They've never done it before. So (MODEL this) they get to the edge of the nest and flap their wings (let bird fall to the ground) Kids will reach over to pick it up. STOP! What should you do if you see a baby bird on the ground? Leave it alone. If it is still there 24 hours later then you can take it to the Wildlife Care Center. What if a nest with a baby bird falls out of a tree? Pick the nest and the bird up and put it back in the tree. Birds have a poor sense of smell so the mother bird will not know that you have helped her babies."

16 C) Green Tarp Area

1. Animal skins. Set up a **PASSING CIRCLE**. Tell kids you are going to give each group an animal that lives in the sanctuary. There are six benches and seven animals, so you can have six to seven groups. If you have six groups, you can be the seventh group. The kids should do **TWO THINGS** with their animal each time. They should ask **WHAT ANIMAL IS IT AND WHAT TRACK, CHEW, POOP, CLAW MARK ETC. WOULD IT LEAVE IN THE WOODS**. Pass, with 20-30 seconds for kids to focus on each animal. When animals have gone all the way around, have kids set them in middle of circle, either in plastic box or on lid so they can all see each animal. **DO NOT TELL THEM THE NAMES** of the animals yet.

2. Animal signs. Same passing groups. Each team will get a bit of evidence that is found in the sanctuary and they must match it with one of the animals they have already handled. When "signs" have gone all the way around, have each group, in turn, say what animal they think made their sign. Or have each team in turn hold up their animal and have the group all vote. As each sign gets solved, have the group hand it to you and place it back in the "SIGNS" box (this way you are mostly packed up by the end of this round). **Are you ready to go on a hike?**

OR, pass around the animal signs first, asking the participants to figure out what animal made it.

If you are short on time, or if it is a young group, pass out the animal and it's sign at the same time.

60 D) Sanctuary Hike on Woodpecker Trail.

Most kids are not that interested in plants and since we only have a limited time, we really try to focus on animals and their signs. The beginning is a good time to remind kids that they only have one hour to totally experience this hike, so if they are walking around taking about TV or something, like they were walking around in school, **THEY WILL MISS MANY COOL THINGS!**

- 5 1. Animal signs and raccoon runs--** Just past bridge, you will see a yellow plastic sign that reads "Anglers - No Angling" (this means no fishing). The sign has an animal "sign". Ask your group to guess what animal shredded part of this sign. They'll guess raccoon, deer, woodpecker and tree squirrel. Tree squirrel is the answer. Look for little teeth marks.

Stop by the concrete bench. This is the first place to look for raccoon runs (trails). Have the kids point with one arm down to the creek, which is the raccoon highway. Now with the other arm, point up at the Audubon feeders where they **PIG OUT** on birdseed at night. Their trails run along the line your arms are making. Have them look down at their feet. Ask "What color are trails?" **BROWN**. What color is the forest? **GREEN**. Point out brown raccoon trail #1 which goes behind cement bench. Make sure they all see it. Challenge your group to point to at least 5 more trails on your way down the hill. Usually, if you find a run on one side of the human trail, it will lead off on the other side! You can also have them scrunch down to raccoon size to look up at one of the trails.

- 2. Balch Creek --** Stop on the bridge. "What do you see in the stream and around the stream? Can you

see any animals or signs of animals? Look for places where the water is moving quickly and where it is moving slowly. Thought question: which is better animal habitat -- a stream with rocks, logs and other fallen things, or a clear, fast-flowing stream?" (Streams with stuff in them provide places for animals to hang out and not get swept down stream.) Optional to read sign on bridge and think about what animals live here. Cutthroat trout are a kind of salmon that do not go to the ocean. These trout are protected from fishing because there are very few of them and other fish can't get into the stream and these can't get out because the stream goes through a grate and underneath Portland, so these fish are stuck in here. Are you ready to quietly sneak up on the pond habitat?

- 10 **3. Pond --** Approach left side (stream side) of pond. Kids will be quick to point out any animals that are visible. Make sure all kids see the ones that are visible. Point out any animal tracks. Then have them sit on the benches if you are going to use the pond cards. How to use the cards:

OPTION 1: Hold up the cards, one at a time, and ask the group to point to where they saw each animal.

OPTION 2: Set up a PASSING CIRCLE. Each group will get a pond animal card. Have the kids talk with their partners and point out where (which habitat) the animal lives in. With younger kids, it may help to work as a big group first and have all kids point to island habitat, deep water habitat, shady water habitat, lily pad habitat, air-over-the-water habitat, mud habitat, etc. After each group has each animal and finds it's habitat, ask if they'd like to have some free time to go explore the stream?

- 10 **4. Stream life --** Carefully go to Balch Creek -- the trail can be slick! Have kids sit on logs.

"Streams and their surrounding vegetation are called Riparian Areas. Your next project is to explore the habitat of FISH and SALAMANDER FOOD... INSECTS! In order to get FREE TIME, you must watch what I do carefully."

Model BENDING YOUR KNEES, REACHING INTO THE WATER PULLING OUT A ROCK, TURNING IT OVER, LOOKING CLOSELY, FINDING ANIMAL ON CARD, CAREFULLY PLACING ROCK BACK IN SAME SPOT. Emphasis that cadisflies look like rock houses. SET BOUNDARIES. Have students pick a partner and hand each team an aquatic insect card. Assign both students and adults to different sections of the stream so they are not all in one spot. They may also see salamanders and crayfish. Have them switch areas, return to you, and report their findings. The more kinds (species) that you find, generally the higher the water quality. Balch Creek is a protected watershed and we are trying to keep the water quality high enough to continue to support cutthroat trout! Meet back at the log benches. Optional wrap up: What kind of water quality does this stream have? Collect cards.

Next stop is our BAT Habitat!

- 5 **5. Bat house and stuffed bats --** Have all kids put their heads near a hole in the fence and find the bat house, have them point so you know that they have all seen it. HAVE STUDENTS STAND IN A CIRCLE. Bats are endangered from loss of habitat so we put up bat boxes to help. Ask them to guess how bats get into house. Pull out your "bat bag." Start by holding up BAT HOUSE and showing to each kids eyeballs how they get in. How many bats could live in a full-size bat house? 50 or more! Would you WANT to have 50 bats living on the side of your house? (Yeah!!!) Next show taxidermied bat. Why do we love 'em? What do they eat? Some eat fruit, some eat nectar, some even eat blood, but all the ones in Oregon eat INSECTS! (Our favorites eat LOTS of mosquitos!) Show guano. Insects in - insects out (very nutritious, for bats and guano for plants!). Pass items around as you are talking to the group.

Let's move on to woodpecker land.

30 **6. Woodpecker holes** -- Walk to trail head of woodpecker trail and enter woodpecker hole loop. Have kids walk around and follow you as they see evidence of woodpeckers here. Pileated woodpeckers (shown in picture on tree - full grown one is twice as big!) make huge rectangular or circular hole. Why do woodpeckers peck wood? Two reasons: food and nest holes. Which are these? Food. Have kids determine if the trees are living or dead. "Dead standing trees are called snags. they are an important part of the forest." Keep looking for animal sign as we go up the woodpecker trail.

7. Little bird house that was pecked by a small downy woodpecker for its own home. Stop here and wait for the entire group to walk up the hill. Usually someone will point out the house. Ask the group if they think this is a bat house or a bird house. The location of the entry gives us the clue.

8. Old Douglas Firs -- Walk students around to RIGHT of big Douglas Firs and then sit in bench circle. "You are now in an old growth or Ancient Forest." Facing log in center tell them that by counting the rings on this one that fell over we found that it was 200 years old. Is the one we walked around old or younger? (It is approximately 400-600 years old.) Explain that you want them to take a good look at an ancient forest so when you say go, they will all sit with their back to you looking out. Then they will scoot one bench to their right (or every other bench) when you say scoot. Have them systematically scoot all the way in a circle just looking and answering questions in the privacy of their own minds. At each bench ask them to look at the forest floor and then slowly look up to the tops of the trees. Also ask one of the following questions (a different one each time):

Are all trees old in an ancient forest? Scoot.

Are all trees the same size? Scoot.

Are all trees alive? Scoot.

Are all big? Scoot.

Are all straight? Scoot.

Can you see one that might be a good home for a woodpecker? Scoot.

A bear? Scoot.

A bat that likes to hide in real thick bark? Scoot.

A raccoon and babies? Scoot.

Can you see a dead log that has other plants growing out of it? Scoot.

How many shades of green do you see? Scoot.

Do all areas get the same amount of light? Scoot.

Can you find a dead tree that's still standing? (A snag.) Scoot.

Can you find a downed log that has plants growing out of it? (A nurse log.) Scoot.

(There are more questions here than benches. Choose the ones you like or add your own.)

9. Nurse log -- "What's being created on top of this log?" (Soil) "What's using this soil to grow? Feel the log. A nurse log is a plant vitamin pill! Can you find any animals that are using this log as a habitat?" As we walk along point to at least five nurse logs.

10. Nurse log with big trees -- "Let's go check out the huge trees coming out of this old nurse log." (Nurse logs serve on the forest floor for about half the time they did when they were standing...if a tree lived 500 years, it will take 250 years for it to breakdown, being great habitat for plants and animals for a long time.)

Be careful about kids touching the nurse log. It is starting to get destroyed from people tearing it apart and kicking it. DO NOT LET YOUR GROUP TOUCH IT.

11. Snag -- "Is this tree dead or alive? Does it help create animal habitat? Look for signs of animals using this tree." (Woodpeckers, insects, squirrel claw marks. Salamanders, and other birds and mammals also use snags.)

12. Squirrel nest box -- "Does this look like any of the houses we've looked at already?" Squirrels would usually use snags but because humans cut down trees instead of letting them become snags, we put up squirrel nest boxes so there are enough places for them to have babies!

13. Shelter -- Good spot to look at maps. Have students pick a partner and sit at table. Explain that you are going to give each team a map and some FREE TIME to try to figure out everywhere they've been and where they are right now. Hand out maps. After a minute or so, have students set the maps on the table, flat between them so you can see them. Have them point at buildings where we started, once they are all on it, slowly, in chronological order, give them one thing to point to at a time. If there is time, ask them to look for animal signs in the shelter (beetle larvae on the post, human carvings on the table).

14. The Path Back -- Ask your group to be careful walking down the slope. Continue to the next station.

********* Any time along the hike that you see the following things, you may pull out the appropriate prop and do the following activities:

(You may also stop to look at any other neat thing that you or one of the group sees.)

| <u>Cue</u> | <u>Prop</u> | <u>Activity</u> |
|------------|-------------|--|
| Mole hill | Mole | <p>Take out mole and ask, "What is the habitat of the mole?" Underground! Stressing gentle handling, pass mole and tell the kids to find two things about the mole that help it live in its habitat.</p> <ol style="list-style-type: none">1) Moles have HUGE front claws for digging. Why do they dig? To find underground insects, and to hide from predators.2) Moles have warm fur that can be pet in both directions. Why? So moles can back up in their tunnels without getting caught on their fur!3) Moles have tiny eyes you can't see. Don't need to see underground, don't want dirt in them!4) Moles bodies look like torpedoes so they can "swim" through the soil.5) Moles don't have orange buck teeth for chewing like rodents (squirrels, mice, beavers, etc.) do. Instead, they have many pointy teeth for crunching the hard exoskeletons of insects. Moles are in the group Insectivora. <p>Extra question: Why are moles so great for the forest? Hint: It has to do with water. Water can flow through their tunnels and get to the roots of plants. Their diggings also loosen up the soil so that the soil itself can hold more water!</p> |

| | | |
|---------------------|-------------------|---|
| Banana Slug | Slug card | A Banana Slug -- one of the weirdest, coolest animals in the forest! (Yes, banana slugs are protected in our sanctuary too! But, we're not so fond of those OTHER slugs, which are all introduced, and much more destructive.) "Who has heard that nasty rumor that slugs are gross? Why do people think they're gross? Because they're slimy! But that's why they're so cool!" Take out the slug card. Tell them why slugs have slime. Now tell them this is their chance to check out these weird animals AND their slime up close! They should gather around the slug and try to find all the parts shown in the diagram. |
| Spider Webs | Web card | Different spiders make different kinds of webs. Ask kids to get with a partner. Hand out spider cards and ask each pair to see if they can find at least two different webs. |
| Animal Track | Track card | Point to a track or make a circle around it. Hand out track cards to partners. Who made the track? Can they match the track in the mud to the track on the card. |
| Fallen Log | | Look for animals and animal signs (beetles, ants, termites, spiders, eggs, beetle larvae tracks and droppings, insect holes); feel the texture; what plants and fungi are using the log? |

2 **Conclusion and Wrap-up:** (At your last stop.)

Sharing; review concepts.

Who heard or saw something neat today? What's one animal or animal sign you heard and what habitat does it live in? Wild animals share the earth with us. What did you learn about how to treat animals and their habitats? Invite students to come on their own with their families.

If you are the head tour guide, or the only tour guide, give the group leader: Warblers (1 per participant), and an ancient forest poster and follow-up activity sheet (1 per class or scout group). Don't forget to collect the fee and put it on Elianne's desk.

Some More Details

What's in the Sanctuary Tour Bag?

- Animal track cards - 10
- Spider web cards - 10
- Map of trail - 10
- Stream insect cards - 10
- Pond animal cards:
 - *Rough Skinned Newt
 - *Red-legged Frog
 - *Western Pond Turtle
 - *Dragonfly
 - *Damselfly
 - *Mosquito and Larvae
 - *Little Brown Bat
 - *Mallard
- Mole
- Bat kit
 - *taxidermy bat
 - *guano (bat droppings, used as fertilizer)
 - *miniature bat house
- Banana Slug card - 1
- Pacific Giant Salamander card - 1
- Cutthroat Trout card - 1
- Whistle
- Bird call
- First aid kit
 - *bandaides
 - *gauze pads
 - *rubber gloves
 - *tissues
- Trash bag

What's on the Bird Song Tape?

First time:

1. Chickadee
2. Steller's Jay
3. Winter Wren
4. Mallard

Second time:

1. Winter Wren
2. Chickadee
3. Mallard
4. Steller's Jay

What Animals and Their Signs are in the Green Tarp Area?

| <u>Animal</u> | <u>Sign</u> |
|---------------------------|---|
| Raccoon (skin) | Track on wood |
| Deer (leg) | Scat (also called droppings, or poop) |
| Mole | Pile of dirt in box |
| Pygmy Owl | Vial of pellets (fur and bone that was not digested) |
| Tree Squirrel | Box with chewed Douglas Fir cones and cedar bark nest, open container with nest |
| Hairy Woodpecker (female) | Carved nest in tree |
| Wood-Boring Beetle | Branch with grooves made by beetle larvae |

A Note About the Pond

The fish that are in the pond were once someone's pets. They were put in the pond without Portland Audubon's permission. The fish are not native and ate all the frogs and tadpoles in the pond. The lesson to be learned from this is:

- 1) not to have a pet unless you are willing to keep it until it dies
- 2) if you move a wild animal to another habitat it can disrupt the natural balance of plants and animals.

DO YOU KNOW HOW TO....

- Get the chaperons to help you**
- Get everyone in the group to hear you**
- Get everyone in the group to see you or the object you're looking at**
- Get everyone in the group involved**
- Adapt the tour for energetic scouts**
- Adapt the tour for preschoolers**

DO YOU KNOW WHAT TO DO IF....?

- Your group arrives late
- Your group needs to leave early
- There are more participants in the group than you expected
- The Bat Roost (basement classroom) is not available
- There are a whole bunch of chairs in the Bat Roost
- You arrive at a station and the group ahead of you is still there
- The next group arrives before you have finished the station
- You're not sure of the order of the stations
- You finish the tour early

- The trails are slippery
- Your group is unprepared for the weather
- A child is being disruptive
- The chaperons are talking or being disruptive
- Someone gets sick or injured on the trail

- Someone asks you a question you don't know the answer to
- Someone sees something neat but it's not mentioned in the standard tour

TRAVELING PROGRAM
OBSERVATION SHEET

1. How did the program leader use open-ended questions to stimulate learning? Give examples.

2. What techniques did the program leader use to focus the group's attention? Give examples.

3. How did the program leader maintain control of the group? Give examples.

4. What techniques were used to create a multi-sensory experience? Give examples.

5. What techniques were used to keep the lab boxes and materials in good condition? Give examples

6. Did the presentation vary from the outline? Give examples.
