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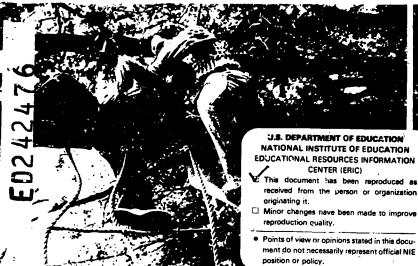
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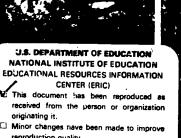
ABSTRACT

The 1983-85 outdoor education handbook for teachers and principals in the Montgomery County Public Schools' (Maryland) outdoor education program gives the Superintendent of Schools' message to participants, lists seven objectives, describes potential areas of study (some possible at all centers, some unique to particular centers), describes program management, and includes several appendices. Objectives indicated include cultivating children's awareness, knowlege, appreciation, and concern for the natural environment and the effect of people's actions upon it. Studies listed for all centers are ecology, geology, forest/aquatic/field/meadow community studies, wildlife, weather, map and compass, astronomy, archaeology, and winter activities; individual centers provide opportunities for historical and geographic studies, aquatic studies, hiking, orienteering, and visits to a solar house and an electricity-generating windmill. A section on program management gives 13 suggestions for successful programs; detailed listings of responsibilities of principals, on-site coordinators, teachers, student assistants, and nurses; and procedures for snow days. A suggested plan for scheduling activities, sample daily and weekly schedules, sample K-P procedures, a tick advisory, sample letters to parents, a parent permission form, an illness/injury reporting form, an attendance/charges voucher, a feedback form, a list of equipment for outdoor education, maps of the centers, and a sunset/twilight/sunrise chart are appended. (MH)

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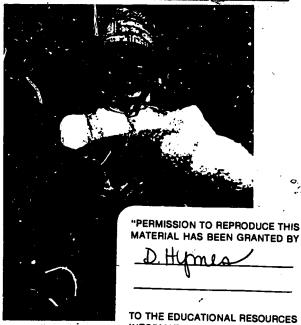








1983-1985 **Outdoor Education Program** Handbook



INFORMATION CENTER (ERIC)."









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HANDBOOK FOR TEACHERS AND PRINCIPALS

Participating in the Montgomery County Public Schools'

OUTDOOR EDUCATION PROGRAM

1983-85

Fall 1983

Montgomery County Public Schools Rockville, Maryland 20850

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MESSAGE TO PARTICIPANTS

This year marks the 20th anniversary of the Montgomery County Public Schools Outdoor Education Program. Beginning with 77 students from Four Corners Elementary School in 1963, the program continually expanded until 1974 when the Lathrop E. Smith Environmental Education Center opened and all schools with sixth graders could be accommodated at one of four centers. Since then over 9,000 students have participated in a residential Outdoor Education Program. This figure has remained relatively constant because as the sixth grade enrollment has decreased it has been possible to increase participation at the eighth grade level. In addition all alternative or supplementary centers involve students in the program.

The reason for such broad participation and support is obvious to anyone who has been a part of the program. Much learning occurs and the students enjoy it. With all of the pressure that we are receiving to do a better job of educating our young people, I believe that it is very important that we not lose sight of what we are doing well. The school system's outdoor education efforts certainly are exemplary and have great meaning for students, staff and the community. Regardless of the direction that public education takes in the years ahead, programs that provide meaningful first-hand experiences for students will always be important.

The residential program began as a result of some staff members wanting their students to have direct experience with discovering the wonders of the natural world. The motto of the program "Nothing is real until it's experienced," has proven to be a simple premise on which an extensive and exciting program has been developed. While its initiation precedes by many years society's realization of the need to protect and maintain the environment, I think that it is very significant that the program affects in a positive way young people who as adults will be able to play an enlightened role as responsible stewards of the environment. I commend all who have contributed to its success.

Wilmer S. Cody Superintendent of Schools



OBJECTIVES OF THE OUTDOOR EDUCATION PROGRAM

In his introductory message, the superintendent has indicated many of the purposes of the Outdoor Education Program. Before this program was initiated, objectives were established by the participating teachers. Over the years these objectives, as well as the program itself, have been amended and refined. We hope this will continue to take place in the future. The objectives as currently stated are as follows:

- 1. To cultivate children's awareness, knowledge, appreciation, and concern for the natural environment and the effect of people's actions upon it
- 2. To motivate children to develop positive attitudes toward learning through varied experiences in the natural environment
- 3. To provide children with many direct experiences in using scientific processes, such as observing, measuring, classifying, and hypothesizing
- 4. To make the children's regular school program more meaningful by applying the knowledge and skills acquired in the classroom to real-life situations beyond the classroom
- 5. To help children to learn to live democratically and responsibly for the welfare of the total group
- 6. To improve human relations among children and between children and adults
- 7. To improve children's physical fitness.



DESCRIPTION OF POTENTIAL AREAS OF STUDY

One of the strengths of the Montgomery County Outdoor Education Program is the fact that the classroom teacher has assumed the major responsibility for the instructional program at the outdoor educational center just as in the regular classroom. Consequently, the program varies from week to week depending on the needs and interests of children from different schools as well as the skills and interests of the participating teachers. In a typical week, a school may include in its program many different activities; but all schools are expected to schedule studies of different ecosystems, including the forest, field, pond and stream, local history, and use of map and compass.

The brief resumes which follow include potential areas of study common to all Outdoor Education Centers as well as those unique to one locality. These areas of study do not exhaust the possibilities for fruitful effort but do include ones that have considerable potential. Some schools schedule blocks of time when children may pursue individual interests. A science field station may be operated as an instructional materials center as well as a laboratory for independent study. Reference materials and science equipment are housed there to be used as needed. The program possibilities are varied enough to fit the particular school's needs or interests and to take advantage of the ongoing curriculum in that school.

STUDIES POSSIBLE AT ALL CENTERS

ECOLOGY

Ecology is the study of the relationship of living things to their environment and to each other. It can include a detailed investigation of soil composition as well as an investigation of the community of living plants and animals to be found in an area. The children can contrast the soil in a woodland with samples of soils found at their own school or elsewhere. A walk along a wooded trail can provide opportunities for boys and girls to observe examples of plants growing as they protect the soil from the rains and winds.

As children are guided to observe plant succession, they see lichens growing on the rocks and catching the first bits of soil that make it possible for the rootless moss to thrive. They discover ferns and other leafy plants aiding the production of soil, see bushes extending their root systems into the available soil, and identify the mature trees of the climax forest.

Numerous examples of plant life can be observed providing food and shelter for animal life while a little probing can reveal the action of fungi in decomposing dead trees and leaves. If children are given real opportunities to investigate the environment, the "balance of nature" takes on new meaning for them; and they gain a greater understanding of the interrelationship of living things and their environment and man's role and responsibility in maintaining it. Some schools devote most of the week to studies of different ecological communities at the site.

GEOLOGY

Soil-related activities that may be incorporated into a school program might include: comparison of percolation rates in selected areas; interpretation and comparison of a variety of soil profiles; soil texture analysis; size sorting; capillarity studies; and pH and other chemical tests. Any or all of the above may then be related to the biological environment of the area.



The general land formations can be observed and their geological history discussed. Outcrops of rock; deposits of sandstone, shale, and limestone; and beds of gravel and sand can be examined whenever the opportunity occurs. Some specimens may be collected. Special emphasis can be given to some of the characteristics of rock, such as hardness, lustre, feel, and crystalization, which can be useful for comparison and classification. Where fossils are known to be available, they can be included in geological studies.

FOREST COMMUNITY

The purpose of this study is to increase the pupil's awareness and appreciation of the total forest community and of the importance of forests in their lives. Children may follow trails or strike off into the woods looking for various plants and animals associated with such an environment. Speculation as to why certain trees are predominant can be encouraged. People's influence and the effect of insects on trees can be noted as children are led to understand the life cycle of trees from seedling to rotting stump. The role of bacteria, fungi, and beneficial insects should also be discussed. At times children can use some of the forester's tools, such as the Biltmore stick to estimate lumber content of logs, calipers to measure tree diameters, and increment bore to examine growth rates of living trees.

AQUATIC COMMUNITIES

The contrast between life in the water and that found in a forest or field community extends a child's knowledge and appreciation of the interdependence of living things and their environment. Children can explore an aquatic environment to discover which plants and animals are present. Microscopic life is found in water samples which later can be examined under a microscope.

The relationship of temperature, solar penetration, water depths, and other physical characteristics are factors influencing the plant and animal populations. Children can visit several types of aquatic environments and observe their characteristics and the adaptations of the plants and animals that live in the wetlands. They can look for the cause and effect of erosion along stream banks and the resulting turbidity and disposition of soil. Students can use secchi disks to determine solar penetration and the depth to which green plants can continue to produce oxygen. The volume and life support capacity of streams can be calculated, a bottom profile of lakes determined, and this information recorded on graphs and charts. The children can observe that organisms collected in fast flowing streams are different from those in still waters, and relate an organism's structure and behavior to adaptation.

FIELD AND MEADOW COMMUNITY

A study of the field and meadow provides an opportunity for making comparisons with the plant and animal life of the forest community. The open area of the field and meadow, with the strong influence of sun, wind, and rain, makes possible a unique community of plants and animals.

This study gives opportunities to investigate the various flowering plants of the meadow, to study the seeds and their methods of dispersal, and to observe plant origins and successions. It is also possible to evaluate the plant and animal populations supported by the field and meadow, to determine the territories established and presided over by various animals, to evaluate the eating preferences and habits of animals, and to observe the flight characteristics of birds, moths, butterflies, and other flying and hopping animals.



The soil can be examined to determine its components and pH, after which students can be led to speculate on its relationship to the life of the field and meadow community.

WILDLIFE

This study is one which is really inseparable from habitat or "community" studies; and when only larger animals are sought, it is usually not very productive because (1) many forms of wildlife are nocturnal and (2) groups of students tend not to be quiet enough to stalk them. However, looking for animals' signs is usually profitable, especially in the winter. Other possibilities likely to be fruitful are population surveys. Live animal traps can be set on predetermined transect lines or quadrats (areas). Overnight "sets" often will result in catches of small mammals which can be recorded as to species, where caught, weather conditions, etc. Amphibians and reptiles also can be trapped; but precautions must be taken with any trapped animals to avoid the obvious dangers, and they should be released after observation.

It is usually of little value simply to bring in specimens unless some record is kept of when and where found. Also, it is probably more meaningful if one group of animals is made the object of intensive search and study. For example, frogs or salamanders could be given special treatment that could produce some data; or bird species could be recorded at a dawn bird watch.

Invertebrates, being more numerous and varied, offer perhaps more opportunities. Insects in particular lend themselves to studies of life cycles, food chains, and populations. Spiders (arachnids), millipedes, centipedes, and crayfish (crustaceans) are arthropods which are easy to capture and interesting to examine to distinguish similarities and differences.

Although often associated with the aquatic environment, microorganisms can be collected from the air and soil. While many of these are actually plant life, protozoan forms can be found; and discussions of the differences between animals and plants can be generated from collecting and examining these forms of life.

WEATHER

During the week the children usually become very aware that the elements influence their daily activities. They can be given the opportunity to investigate the weather to learn more about the many ingredients that help determine local atmospheric conditions.

A weather station, equipped with instruments ranging from the anemometer to the hygrometer, is available for daily weather observations. Along with reading and
recording information, the children can be assisted in analyzing their findings
and presenting a report and forecast at mealtimes. Realizing that data is
recorded from only a single station, such forecasts are not always completely
accurate. However, the activity does provide opportunities for inductive
reasoning and critical thinking.



MAP AND COMPASS

The objectives in a map and compass study are to have the children develop skill and ability to read contour lines and to predict what the terrain will be like on a map and compass hike. They also can attempt to locate prominent features by using their compass and map reading skills. A map and compass hike also can serve as a way of getting acquainted with the area. If the children don't take this hike early in the week, the predictive aspects of the hike are difficult to carry out. In order to get the most from the outdoor setting, making models of contour maps, learning about contours, and learning how to read and set a compass are skills that the children should acquire before going to an Outdoor Education Center.

ASTRONOMY

Observation points have been chosen at each outdoor education site which are relatively free from the reflecting lights of metropolitan areas. Students can observe stars, planets, satellites, and Messier objects; differentiate celestial bodies; and classify stars. To aid in this, 3-inch refracting telescopes are available. Activities concerned with direction, angles, orbital motion, and measurement may be taught either before or during the student's outdoor education experience. A telescope attachment for observing sun spots is available for use in daytime astronomy activities.

ARCHAEOLOGY

By carefully digging at the site of an old home, mill, or school house, students may be able to reconstruct and interpret a part of the past. Through systematic excavation, artifacts can be uncovered that provide clues to bygone craftsmanship and ways of living. Working with grid patterns and simple hand tools, children develop patience and learn to give attention to details. This activity also requires careful note-taking and record-keeping.

WINTER ACTIVITIES

For groups participating during the winter, there are a variety of activities that are especially appropriate to that season. These include a study of snowflakes, measurement of snow depths in various areas such as the forest, the field, and drifts, and thawing and refreezing of snow and water. A variety of birds can be seen and are easy to attract by setting up a feeding station. Children can investigate natural food sources in the woods, study tracks in the snow, compare different kinds of buds and examine how they are formed and protect themselves from winter temperatures and conditions. Some buds can be dissected to reveal the tiny pleaves which will begin growing in the spring. There are many aquatic activities that can be included such as measuring the amount of moving water in a stream, searching out the springs which are its source, comparing temperature differences, and speculating on the amount and kinds of animal life active in the winter. Various animal homes in shrubs and trees are especially interesting and easy to find when leaves are off the trees.

CONFIDENCE COURSE

Most centers have a confidence course, which is a series of mentally and physically challenging events designed for groups of 6 to 10 students. As participants strive and extend themselves to accomplish these obstacle course type activities, they achieve satisfaction and help build positive self-concepts, increased confidence, and trust in others. To try to ensure that events are conducted safely with maximum benefit to students, instructors must participate in an MCPS training workshop before they can involve students in these activities.



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STUDIES UNIQUE TO PARTICULAR CENTERS

MAR-LU-RIDGE OUTDOOR EDUCATION CENTER

Mar-Lu-Ridge, located near the southern tip of the Catoctin Mountains and overlooking the Potomac River, encompasses 540 acres of mixed deciduous woodland and includes several small ponds. Opportunities for students to link the past with the present can be made in studies of the C & O Canal, Harper's Ferry, Virginius Island, and Maryland Heights. For the study of the C & O Canal, students may be taken to Lander or to Point of Rocks and given a list of ecological and sociological objects to observe on a hike along the towpath of the canal. The influences of strategic geographic features and climatic conditions can be studied as students view Harper's Ferry from Overlook Cliff or explore the older section of the town and Virginius Island. An appreciation for humans' struggle for existence can be developed as students examine and observe former life styles through the National Park Service's Living History program, the cemetery, and Civil War groundworks on Maryland Heights. A farm near Mar-Lu-Ridge may be visited to give students an idea of a working farm and how the farmer uses available resources and practices conservation methods.

SUMMIT LAKE OUTDOOR EDUCATION CENTER

An old church, graveyard, and some ruins are adjacent to this center and provide resources for an interesting historical study. An extensive plantation of young white pine trees and smaller stands of other evergreens afford an unusual opportunity to observe growth rates and make comparative studies. Animal habitats, insect life, and plant succession are all a part of this young forest. Outdoor math can also be an integral part of this study by measuring height and diameter of the trees, pacing off an acre, and computing the number of trees in it. To aid in timber cruising, a stand of 20 trees has been identified, measured, and the value estimated. The lake and streams provide a wide variety of aquatic life in several distinctive habitats with physical characteristics which can be related to the types of plants and animals inhabiting them. An orienteering course has been laid out, and a small confidence course may be used by teachers who have had the necessary training. Numerous rock outcroppings can facilitate an extensive geology lesson, and junior high earth science studies may include a visit to a local wild cave.

GLENKIRK OUTDOOR EDUCATION CENTER

Glenkirk, located at the edge of Lake Manassas, an 800-acre reservoir, offers over a mile of shoreline. Many aquatic studies can be accommodated. Children can measure the temperature and pH, as indicators of the quality of the water, as well as sample plant and animal life that might be expected to live there. Actual collections of aquatic life can be taken for later use in a lab experience, and a canoemaran is available for deep water and lake bottom studies. Other activities for which the Glenkirk area is very well suited include forestry, wildlife, and insects. Forestry students may discover a number of subforests and their boundaries within the extensive woodlands. Wildlife studies can include stalking and trapping activities along with feeding station trails throughout the area. Numerous trails along the shoreline and through the forest provide access to many of the study areas on the 192-acre Glenkirk property.



LATHROP E. SMITH ENVIRONMENTAL EDUCATION CENTER

This center, owned and operated by Montgomery County Public Schools, is located approximately in the middle of Montgomery County and is included completely within the boundaries of the Rock Creek Regional Park. Meadowside Nature Center is a short walk away, and visits to the exhibit hall and Curiosity Corner can be arranged through the on-site coordinator. The over 450 acres of rolling hills which are immediately adjacent to the Smith Center have been dedicated as a natural or conservation area by the park commission. As such, the springs, marshes, creeks, lake, ponds, forests, and meadows are being managed and maintained as environmental study areas. Hiking trails provide access to all points. Program possibilities at Smith Center include water quality monitoring along the nearby North Branch of Rock Creek. Orienteering courses designed to test advanced map and compass skills have been established in the area. Nearby grist mill ruins and an old graveyard provide the starting point for historical studies. The potential for several agricultural activities exists, including a garden, an apiary, and a poultry house. The Pioneer Farmstead includes a relocated and restored pre-Civil War log cabin, a smoke house, goat shed, corn crib, root cellar, and herb garden. A planetarium with a 14' dome is located at the nature center. A physically and mentally challenging "Confidence Course" is available but requires training for teachers wishing to use it with students. Information about the Solar School House and electricity generating windmill is available. The media center, called the Retriever Room, contains instructional resources to support the outdoor education programs at all centers.

CAMP LETTS OUTDOOR EDUCATION CENTER

Camp Letts is located ten miles south of Annapolis on a 219-acre peninsula on the Rhode River, one mile from the Chesapeake Bay. The estuarine environment includes both fresh and salt water marshes, as well as low hills, bluffs, and reforested farm land. A canoemaran is available for transporting students to a nearby island for comparative studies. Areas of special study include river, stream, marsh, and swamp. Numerous trails along the shoreline and through the woods provide access to study areas including a former farm that is a potential archaeological dig site. The Chesapeake Bay Center for Estuarine Studies is nearby. This Smithsonian facility can be used to provide ecological experiences in salt marsh studies, bird banding, and plant succession. Prior arrangements are necessary and can be made by writing Chesapeake Bay Center, Route 4, Box 622, Edgewater, Maryland 21037, or by calling 798-4424 or 261-4190.



MANAGEMENT OF THE OUTDOOR EDUCATION PROGRAM

SUGGESTIONS FOR A SUCCESSFUL PROGRAM

Keeping the following points in mind will help insure a successful program.

- 1. Designate person-in-charge, if other than principal, early in planning process.
- Contact on-site coordinator early to assist with planning.
- 3. Avoid exceeding staffing limits of one staff member for every six students. Involve student teachers in program, if possible.
- 4. Allow at least two hours for each major instructional activity in the daily schedule.
- 5. Avoid giving students a lot of paperwork to do in the field.
- 6. Get students into the environment; give them diversified experiences; do the things you can't do in the regular classroom.
- 7. In cold weather, don't spend too much time in one place; keep students moving (and warm).
- 8. Plan carefully for use of time between dinner and evening activity.
- 9. Have at least one staff member eat at each table with students.
- 10. Plan emergency supplementary activities for prolonged periods of inclement weather.
- 11. Return specimens to the natural environment, leaving it the way it was found.
- 12. Consider nighttime activity possibilities for small interest groups in addition to activities planned for the total group.
- 13. Evaluate the program at the end of the week (Thursday night).

RESPONSIBL ITIES OF THE PRINCIPAL

A. Personnel

- 1. <u>Leadership</u>. Assume leadership personally at the outdoor education center during the time that children from the school are there or designate another staff member to be in charge.
- 2. Workshop Participation. Arrange for teachers new to the program or site to participate in an on-site workshop after the workshop schedule is received. If substitutes are needed these should be requested through the area associate superintendent. (It is important for teachers to attend the scheduled workshop as subsequent training sessions are difficult to arrange.)



- 3. Additional Instructors. Contact and arrange schedule for additional instructors from sources other than own school when this is necessary.
- 4. <u>Substitutes</u>. Secure substitutes when and if necessary for the teachers participating in the program. This requires the approval of the area associate superintendent.
- Student Assistants. If necessary, secure high school students as student assistants through cooperation of high school principal. The number of high school students will be determined by the need for female or male help but, in any case, should not exceed the number to bring the total staff ratio to one per six children. These students should be 16 and have a work permit, which can be signed by the high school counselor or principal of the school using such students. This will make it possible for them to be covered by Workmen's Compensation Insurance. They must also have a permission slip (Appendix G) signed by their parent or guardian. When high school students are used as student assistants, the principal must carry out the following procedures in preparing them:
 - a) Request principal of high school to approve participation of students and to recommend students who are interested in environmental education and who are reliable. This should be done well in advance of the time school is scheduled to participate in the outdoor education program.
 - b) Interview nominees.
 - c) Explain in detail what the responsibilities of the students will be during the program and what is expected of them.
 - d) Prior to the on-site experience, arrange for them to meet and work with the teachers and sixth graders with whom they will be working at the outdoor education center; explain their responsibilities to the sixth grade students.
 - e) Jointly develop a schedule of their time and responsibilities the week they will be assisting at the center. Make sure they know and indicate to whom they are responsible at all times.
 - f) If possible, arrange for them to participate in outdoor education planning sessions with the rest of the faculty.
 - g) Invite them to attend the outdoor education program presentation for parents; introduce them, and explain what their part in the program will be.
 - h) Remind them to bring a bag lunch and Parental Permission Form (#345-7) on the first day of the program.

- 6. <u>KP Supervision</u>. Select one staff person to take charge of KP procedures all week, preferably the same person for the whole week. If two or more schools are present, it is desirable for one person to take charge for all schools.
- 7. <u>Cabin Assignment</u>. Make sleeping arrangements so that at least one staff member is assigned to each dormitory/cabin for supervision during sleeping hours.
- 8. <u>Volunteers</u>. Submit names of parent volunteers or any adults, other than professional staff, who are assisting with the program, so they will be covered by Workmen's Compensation Insurance in case of an accident. Such names should be submitted along with the week's schedule (See C-3).
- 9. <u>Emergency Transportation</u>. Make sure a car is available at the outdoor education center for use during an emergency.
- 10. <u>Feedback Form</u>. Provide feedback on the outdoor education center staff and facility by completing the form which will be provided (See Appendix J) and review with the high school student assistants the extent to which they accomplished what was expected of them.

B. Finance

1. Student Fees. Collect and deposit in school bank account all student fees connected with the program. Arrange confidential financial assistance for students not able to afford fee, through PTA or by sending a memo to the Office of the Deputy Superintendent of Schools through your area associate superintendent. The fee for junior high students is one dollar per day more than for elementary school students. If staff exceeds one for every six students, the charge for additional staff will be at the same rate charged students. Fees charged will be as follows:

5	days	Monday through Friday (4 nights, 12 meals)	Eull	charge
4	days	(3 nights, 9 meals)	3/4	charge
3	days	(2 nights, 6 meals)	L/2	charge
2	days	(1 night, 3 meals)	L/4	charge

2. Bill Payment. Do not submit fees until billed. Each school will be billed directly by the director of accounting for the number of participating students after the school's return from the outdoor education center. This will be done on MCPS Form #280-46; and the pink copy should be returned with the school's remittance to receipts clerk, Department of Financial Services, Educational Services Center. The amount billed will be that determined by the principal, site manager, and on-site coordinator during the school's last day at the center. (See Attendance Voucher Form, Appendix I.) Charges for other expenses should be paid directly to the outdoor education center.



- 3. <u>Visitor's Meals</u>. Collect meal fee for visitors, and pay cash to employee-representative of the center, or have this amount billed to the school.
- 4. Overnight Stipend. Inform teachers participating in the outdoor education program at one of the outdoor education centers that they will be compensated by a stipend on a per diem basis. The stipend will be made available to classroom teachers accompanying their classes and other professional staff members of MCPS on schedules A to D. The amount of the stipend shall be as negotiated for each overnight stay at one of the centers. Supporting services staff are also eligible for overnight stipends as negotiated. Teachers and supporting services staff receiving this "extra pay for extra responsibility" will supervise students at night and assume other responsibilities as assigned. The number of professional and supporting services staff who receive the stipend may not exceed one for every 15 students. Any exceptions to this ratio must be approved by the area associate superintendent. For all staff receiving the stipend, MCPS Form #430-19 should be filled out and sent to the Division of Payroll along with the regular professional time sheets.
- 5. Use of Private Vehicles. Where use of private vehicles is concerned, the principal should provide MCPS Form #220-2 (Monthly Statement of Mileage for Use of Private Vehicle) to staff members, including parents and others serving as resource persons if they desire reimbursement for mileage. Use of such vehicles should have the prior approval of the principal. Persons taking their car to an outdoor education center should be reminded that in case of an accident their own insurance carrier is primarily liable. Form #220-2 should be signed by the principal as we'l as the staff member(s) and forwarded to the area associate superintendent for approval. It is recommended that staff members ride in school buses with the students, but if some can't, that they form car pools.
- 6. <u>Increasing Student Fee</u>. The basic fee for students may not be increased without the approval of the area associate superintendent and the coordinator of outdoor education.

C. Instruction

- Scheduling. Schedule the week's activities in cooperation with teachers. (Many principals select one area of study and assume the teaching responsibility for it.)
- 2. <u>Standards of Conduct</u>. Establish standards of conduct to assure proper use of the facilities and protection of the natural environment from undue disturbance especially by indiscriminate collecting.
- 3. <u>Submitting Schedule</u>. Provide the area director for educational services and the appropriate on-site coordinator with an advance copy of the



instructional schedule and roster at least ten days in advance of participation. Indicate who will be teaching what activities and when and the number of students in each instructional group.

- 4. <u>Schedule Changes</u>. Keep staff and children informed of necessary changes in daily schedule.
- 5. <u>Supplies and Equipment</u>. Provide needed instructional supplies and equipment beyond those available at the center. (Suggestions are in Appendix K.)
- 6. Evaluation. Plan time to conduct evaluation of each day's activities with the staff.
- 7. <u>Confidential Information</u>. Make certain that privileged information about pupils is discussed only with appropriate staff.

D. Health and Safety

- 1. <u>Students' Medicines</u>. Collect all medicines from students on Monday morning and turn them over to the nurse upon arrival at the outdoor education center.
- 2. Alphabetized List of Students. Provide 2 alphabetized lists of students, one for boys and one for girls, together with parental permission slips to the nurse on arrival at center.
- 3. Accident and Illness Report. Secure and countersign the nurse's Accident and Illness Report, which is to substantiate insurance claims for medical reimbursement. Forms are provided by the on-site coordinator. (See sample form in Appendix H.)
- 4. Medical Bills (Hospital). Make certain that doctors and hospitals are requested to send bills to the school.
- 5. Medical Bills (School). Submit medical bills, after verification at the school, to the Smith Center. Enclose a written explanation of what the treatment was for and the name and school of the student receiving the treatment.
- 6. Student Illness Disposition. Make decision when necessary whether student should be sent home. Parents also should be involved in such decision. A proportional reduction of student fee will be made on Friday when Attendance Voucher is completed and signed. (See Appendix I.)
- 7. <u>Fire Emergency Procedure</u>. Make sure children and staff know where to assemble in the event of fire or other emergency. (Assembly point is usually the flagpole.)

E. Food Service

1. <u>Meal Schedule</u>. Observe the time schedule for meals to comply with the availability of kitchen staff. Breakfast is at 8:00, lunch at 12:00,

- and dinner at 5:00. At any one meal, everyone should be seated and served promptly at the specified time. Tables should be cleared before any prolonged amouncements or activities around the dining tables so as to expedite the work of the kitchen staff.
- 2. <u>Seating Arrangement</u>. Arrange for professional staff member to be seated at all tables. This provides better control and facilitates informality and communication between staff and students.
- 3. KP Responsibility. Arrange children in KP details in rotation so that all share this responsibility. The mechanics of the service are at the direction of the KP staff person. In any case, at least one KP should be assigned to each table so that only a KP serves food, obtains seconds, or performs other tasks that require leaving the table. The KP staff person should supervise the dining room clean-up after each meal. If food is spilled on the floor or mud is tracked in during rainy weather, the floor should be mopped.
- 4. Special Diets. In situations where one or more students have special diets, the kitchen staff should be informed of this. If food is brought by the student(s), storage arrangements should be made. If the kitchen is supplying alternate meals, what these will be and how this will be handled should be determined in consultation with the kitchen manager.

F. Facilities

- 1. <u>Initial Inspection</u>. Inspect the facilities upon arrival with the onsite coordinator to ascertain conditions, especially any that might require immediate attention from the facility management. The onsite coordinator will report such conditions to the facility management.
- 2. <u>Standards of Conduct</u>. Establish standards of conduct to assure protection of property and to maintain cleanliness of buildings and grounds at all times, but especially at the close of occupancy.
- 3. <u>Cabin Supervision</u>. Assign staff to sleeping quarters so as to obtain maximum supervision at all times. At least one staff member should be in each dormitory/cabin whenever students are there.
- 4. <u>Final Inspection</u>. Inspect the property with the on-site coordinator at close of occupancy to ascertain damage, if any, and to be certain that water supply and electric lights are turned off; heating thermostats are set at 65 degrees; that floors are clean; wastebaskets emptied; grounds policed; and doors closed.
- <u>Damages</u>. Report to the on-site coordinator any damages occurring during the week. Assessment of cost of repair or replacement will be made if necessary.



6. <u>Smoking/Drinking</u>. Make sure all staff members are aware that comsumption of alcoholic beverages within the outdoor education facilities or grounds is not permitted and that staff members should not smoke in the presence of students.

G. Transportation

- 1. Amount of Luggage. Limit the luggage of children to one travel case and one bedroll (blankets or sleeping bag). Such personal gear as musical instruments might be placed with the school equipment.
- 2. <u>Luggage Arrangement</u>. Arrange the luggage and equipment for loading in such order as to expedite unloading at destination (e.g., separate boys' and girls' luggage).
- 3. <u>Bag Lunches</u>. On first day of program, place children's lunches in large box(es) for distribution at lunch time at the outdoor education center.
- 4. <u>Bus Loading and Unloading</u>. Assign specific staff members and students to load and unload the buses.
- 5. <u>Departure Time</u>. Prepare for opening-day departure as soon after 9:00 a.m. as the buses arrive at school for loading. Do not call the Area Transportation Office unless buses are not at school by 9:45.
- 6. <u>Field Trips en Route</u>. Do not plan for field trips on the way to and from the outdoor education center without making the necessary prior arrangements with the Division of Transportation and determining charges.
- 7. Return Times. Arrange final-day schedule so as to be ready to leave at the specified time, allowing sufficient time for loading baggage. Cabins should be cleaned and cleared by 10:00 a.m., Friday, and not used after this time. Buses should arrive approximately one hour before departure, which should be as follows:

Glenkirk 12:30 p.m. Summit Lake 12:00 Noon Mar-Lu-Ridge 12:30 p.m. Camp Letts 12:30 p.m. Smith Center 1:00 p.m.

H. Joint Occupancy of Facility

Schedule, with the other school(s), a joint meeting well in advance of your scheduled time at the center, whether or not the instructional program will be a joint one. Invite the on-site coordinator to the joint meeting to provide up-to-date information as to what is available at the facility, what resource materials can be provided, what the coordinator can contribute, and any suggestions he/she might make which would contribute to a more successful week at the center. The following items should be discussed and resolved:

 How the instruction program will be handled; whether it will be a joint program, separate ones, or a modified version of either. A joint program is usually most productive.



- What facilities are to be used and when, so as to avoid conflict in use of cabins, study sites, rooms, etc.
- 3. What equipment each school will bring, and what equipment at the center each will use and when
- 4. How different staff members can best be utilized
- 5. How responsibility will be delineated, with a clear indication of who is in charge and when
- 6. When the on-site coordinator will be needed for instruction at the center, avoiding conflict between schools and times the coordinator is not available
- 7. What staff member(s) will take charge of the KPs for the entire week for both schools

RESPONSIBILITIES OF THE ON-SITE COORDINATOR

On-site coordinators are assigned to each of the outdoor education sites. They can be reached at the Lathrop E. Smith Environmental Education Center, 924-2626; although generally, most of Monday and Friday and all of Tuesday, Wednesday, and Thursday, they are at the outdoor education centers. Use of the on-site coordinators is one way of reducing the number of staff members needed as well as reducing the size of instructional groups. They are responsible for seeing that all agreements between the school system and the center's management are understood and carried out. All schools should involve the appropriate on-site coordinator in at least one planning meeting prior to attending the outdoor education center. Responsibilities can be divided into two general categories as follows:

A. Coordination

- School/Center Liaison. Serve as liaison person between school staff and center staff.
- Parent Meetings. Assist the principal and staff when needed in explaining the purpose and nature of the outdoor education program to parents, PTA, or other groups.
- 3. Acquiring Resources. Assist in securing resource people or materials in conjunction with the school's outdoor education program plan.
- 4. Availability. Be available to assist participating school while at the center, being on site when the school arrives and departs, in addition to scheduled periods of time during the week.
- 5. Forms. See that all necessary forms such as financial, health, etc., are completed before a school leaves the center.

- 6. Site and Procedures Orientation. Help familiarize the school starf with the best possible use of the facility, terrain, and equipment, knowing that certain rules, areas of study, and boundaries change from year to year.
- 7. <u>Field Trips</u>. Assist in arrangements for field trips where traditionally a part of the program.

B. Planning and Instruction

- 1. <u>Planning</u>. Meet with the school's staff for the purpose of planning the instructional program while at the center. (See Appendix A.)
- 2. <u>Resources and Procedures Awareness</u>. Make staff aware of the area's resources and the routines and procedures unique to the center.
- 3. <u>Schedule Revisions and Evaluations</u>. Contribute to planning and evaluation sessions while at the center.
- 4. <u>Student Assistants</u>. Meet with student assistants during the first day and review their responsibilities and what's expected of them.
- 5. <u>Teaching</u>. Teach students and/or assist other teachers with instruction when at the center.
- 6. Equipment. Make staff aware of equipment available at the center and provide available equipment for instructional program.
- 7. Evening Activities. Suggest and/or participate in appropriate evening activities.
- 8. <u>Curricular Materials</u>. Make available whatever curricular materials are needed and available.
- 9. <u>Curriculum Development</u>. Assist in developing additional needed curricular materials.
- 10. <u>Staff Development</u>. Serve as a demonstration teacher or assist in conducting teacher workshops on the school site or at the outdoor education center.
- 11. Overnight Responsibilities. Assist with evening programs or other activities on the first and last nights of the program; as requested: These are the two nights the on-site coordinator is available to spend the night without being charged against the school's stipend allocation.



CURRENT LIST OF ON-SITE COORDINATORS AND OUTDOOR EDUCATION CENTERS

Outdoor Education Coordinator: Joe Howard

On-site Coordinators:

Georgeanne Welde Art Hugglestone Bernie Samm Bill Kraegel

On-site coordinators can be reached by phoning the Smith Center: 924-2626

- Glenkirk Outdoor Education Center
 P.O. Bo x 130
 Gainesville, Virginia 22065 (Prince William County)
 591-3362 (Local call from Montgomery County)
- Camp Letts Outdoor Education Center
 P.O. Box 208
 Edgewater, Maryland 21037 (Anne Arundel County)
 261-4286 (Local call from Montgomery County)
- Mar-Lu-Ridge Outdoor Education Center Jefferson, Maryland 21755 (Frederick County) 301-874-5544
- 4. Lathrop E. Smith Environmental Education Center 5110 Meadowside Lane Rockville, Maryland 20855 924-2626
- 5. Summit Lake Outdoor Education Center Emmitsburg, Maryland 21727 (Frederick County) 301-271-9810

A map and written directions to each outdoor education center and a site map of the five facilities is located in the appendix of this handbook.

RESPONSIBILITIES OF TEACHERS

Students must be supervised 24 hours a day. Most of the following tasks are the responsibility of each participating teacher, but some may be assumed by just one teacher or shared jointly. They are:

- 1. Workshop Participation. Participate in an on-site workshop at the out-door education center where school is scheduled to become acquainted with its facilities and environmental features.
- 2. <u>Schedule Preparation</u>. Prepare daily and weekly schedules of activities in cooperation with other teachers, principal, and on-site coordinator.







- 2. <u>Parent Permission Forms</u>. Review all permission slips signed by parents and check them against alphabetical list. Report total number of students and any discrepancy between list and permission slips to the on-site coordinator.
- 3. Special Considerations. Furnish on-site coordinator with list of children who need special consideration due to medical, physical, or dietary limitations. Give the kitchen staff a written list of students with special dietary requirements.
- 4. <u>Medicines</u>. Keep all medicines in health room and administer them as prescribed.
- 5. <u>Staff Directory</u>. Compile a list of staff members, emergency phone numbers, and any pertinent health information.
- 6. <u>Poison Tvy</u>. Compile a list of students who arrive at the center with poison ivy rash.
- 7. <u>Ticks</u>. When ticks are apt to be found, inform students of this and urge them to do periodic examinations or "tick check." Compile a list of students who request removal of ticks, and inform principal or teacher-in-charge that a model letter is available which can be reproduced and sent to parents if the school so desires. (See Appendix C-2.)
- 8. <u>Informing Parents</u>. Consult with the principal or teacher-in-charge in determining when parents will be informed regarding accident or illness.
- 9. <u>First Aid</u>. Apply first-aid measures when needed and prepare first-aid kits for trips.
- 10. <u>Being on Call</u>. Be on call for advice regarding care of sick or injured children or staff in case of emergency during off-duty hours.
- 11. Insurance Claim Procedure. Remind teacher accompanying ill or injured student to doctor's office or hospital to inform doctor(s) or hospital that student has insurance coverage for medical expenses. Impress upon them the importance of sending all bills to the school in care of the principal. This will expedite payment. Whenever possible, fill out the top two-thirds of the insurance claim form and send it to the outdoor education office. High school student assistants are covered by Workmen's Compensation Insurance.
- 12: Weekly Report. Complete weekly Injury and Illness Report to include the following information for insurance reports: student's age, sex, home address, the cause of accident, type of activity student was engaged in, activity supervisor, and adult witness(es).
- 13. <u>Cabin Inspection</u>. Inspect sleeping quarters daily to report conditions as observed and recommend improvements in care when necessary.

- 14. Supplies. Inventory and maintain medical supplies and materials. Submit requests for needed materials to on-site coordinator.
- Employment Procedures. Conform to employment procedures of MCPS with respect to medical requirements and payroll voucher procedures submitted to the Payroll Division through the on-site coordinator.
- 16. <u>Field Trips</u>. Accompany field trips away from site when all students participate.

SNOW DAYS

- Inclement Weather Procedures. If schools are closed because of inclement weather on the first day of the week, the outdoor education centers will open the next day, if schools do. If schools are closed for the first two days of the week, the outdoor education centers will open on the third day, if schools do. If schools are closed for more than two days, the outdoor education program will be cancelled for that week. If schools are closed for inclement weather the last day of the week, students will leave early as soon as transportation arrangements can be made. If schools are closed in the middle of the week, schools with students at the outdoor education centers will be contacted by the outdoor education office, a decision made as to the best course of action, and the resident staff notified.
- 2. <u>Delayed Opening</u>. When there is a delayed opening of one hour, conditions at the outdoor education centers will be ascertained and a decision made whether or not to transport students to the centers late or wait until the next day. When there is a delayed opening of two hours on the first day of the school week, schools will not go to outdoor education centers outside the county but will be transported to the centers the next day. The outdoor education coordinator will inform principals of the decision about the one hour delayed opening as soon as possible.
- 3. Snow Day Compensation. When teachers are at an outdoor education center and there is a snow day, they will be granted a day of Unusual or Imperative Leave to be used within 30 duty days after the snow day. This applies only to teachers on the A to D scale when schools are closed, but to all professional personnel at the outdoor education center when schools and central offices are closed. The principal has the responsibility for control.

APPENDIX A

Suggested Plan for Scheduling Activities

Step	I.	List possible instructional activities here:	Step	II.	List person(s) responsible for instruction here:
	1.	Forest Study			
	2.	Map and Compass Study			
	3.	Wildlife Study			
	4.	Weather Study			
	5.	Pond Study			
	6.	Outdoor Art			
	7.	Rock and Soil Study			
	8.	Historical Study			
	ġ.		,		
. 1	LO.				
Step	III.	List instructional groups of c each group (Instructional Grou			
		Group A - 15 students Group B - 15 students			
		Group C - 15 students			
		Group D - 16 students			

Step IV. Work out daily schedule here (instructional periods only) by filling in blanks with instructional activities decided on:

Monday	Tuesday	Wednesday	Thursday	Friday
A				
В				
С	·			
D				
Lunch			-	
Α		3331		
В				
c ·	-			
D	,		:	



APPENDIX B

Sample Daily Schedule

7:00 - 7:45 a.m.	Rise, Clean Cabin, Prepare for Day
7:45 - 8:00	Flag Raising, K.P. Duty, Weather Observations
8:00 - 8:45	Breakfast, Weather Report, General Announcements
8:45 - 9:00	K.P. Duty
9:00 - 9:30	Teacher - Class Planning and Preparation Session
9:30 - 11:30	Instructional Activity
11:30 - 12:00	Independent Study, K.P. Duty
12:00 - 12:45 p.m.	Lunch, Mail Call, Cabin Inspection Report, General Announcements, K.P. Duty
12:45 - 1:30	Rest Period, Quiet Games, Reading, Writing
1:30 - 4:00	Instructional Activity
4:00 - 4:45	Supervised Independent Study, Recreation
4:45 - 5:00	Prepare for Dinner, K.P. Duty
5:00 - 6:00	Dinner, General Announcements, Weather Report
6:00 - 6:15	K.P. Duty, Flag Lowering
6:15 - 6:45	Supervised Independent Study, Recreation, Preparation for Skits
6:45 - 7:30	Teacher - Class Review and Evaluation Session
7:30 - 9:00	Evening Activity
9:00 - 9:15	Snack
9:30	Taps, Lights Out



APPENDIX C-1

Sample KP Procedures

BEFORE THE MEAL

Wash Your Hands!

Sponge off the table.

Put flatware, napkin, and a drink at each place.

Put condiments on the table.

Use trays to carry serving dishes and glasses.

AFTER THE MEAL

Return serving dishes to serving counter.

Scrape uneaten food onto one plate, then empty into trash bag.

Empty liquids at service window, then put glasses into rack.

Take scraped stacked plates and flatware to service window.

Sponge off the table.

Sweep the floor.

Tie trash bag and remove to disposal area.

APPENDIX C-2

Tick Advisory

During your child's stay at (Name of Center)
it was necessary to remove ticks from some of the children; and it is conceivable that other children removed ticks from themselves. You may want to question your child to see if this had been the case and/or check your child to see that there are no ticks at the present time.

Not many tick attachments result in infection; but if a fever does develop within the incubation period (3 to 10 days), be sure you inform your doctor.



APPENDIX D

Sample Weekly Schedule

TIME	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
7:00 - 7:45 a.m. 8:00 - 8:45		Camp Clean Up Independent Study			
0:00 - 0:43			r Report, General Ann	ouncements	Instructional
9:00	Depart from School.	Teacher - Class Planning & Prep.	Teacher - Class Planning & Prep.	Teacher - Class Planning & Prep.	Activity Work on Journals or Logs
9;30 - 11:30		Instructional Activity	Instructional Activity	Instructional Activity	
l:30 - 12:00	Orientation Tour	Independent Study	Independent Study	Independent Study	Glenkirk 11:30 - Lunch
2:00 - 12:45 p.m.	Lunch, Mail Cal	1, Cabin Inspection	Reports, General Ann	ouncements	12:30 - Departure Time
2:45 - 1:30	Rest Period, Qu	iet Games, Reading,			Mar-Lu-Ridge 11:30 - Lunch
1:30 - 4:00	Instructional Activities	Instructional Activities	Instructional Activities	Instructional Activities	12:30 - Departure Time
:00 - 4:45	Supervised Inde	pendent Study, Recre	eational Activities		Smith Center 12:00 - Lunch
4:45 - 5:00	Preparation for	Dinner		•	1:00 - Departure Time
5:00 - 6:15	Dinner, General	Announcements, Weat	ther Report, Flag Low	ering	Summit Lake 11:00 - Lunch
5:15 - 6:45	Practice for Ta	lent Show or Skits, pendent Study, Recre			12:00 - Departure Time
:45 - 7:30	Teacher - Class				
7:30 - 9:00	Evening Activit		nare Dance, Sing Alon nt Hikes, Story Telli	g, Animal Watch, ng, Talent Show, Etc.	
9:00 - 9:15	Snack	,			
9:30	Taps - Lights 0	uţ			

APPENDIX E

Sample Letter #1 to Parents

(Name of School)

(Date)

To:	Parents of Sixth Graders							
From:	, Principal							
Subject:	Meeting Concerning Outdoor Edu	ication Pro	gram					
	(Date) at 8:0 parents will take place in the that time, we would like to de	e all-purpo	se room at					
and/or a fi for discuss	el could benefit your children lm to illustrate our presentat ion. Please make every effort amily present at this meeting.	ion and the	ere will be ample opportunity					
know approx	s will be served after a questi imately how many to prepare for portion of this sheet?							
	•							
I (will, wi	ll not) be able to attend the r	meeting of	parents of sixth graders					
at	, 4	School en	(Date)					
•								
· · · · · · · · · · · · · · · · · · ·	(Child's Name)		Signature of Parent)					



APPENDIX F

Sample Letter #2 to Parents

(Name of School)

(Date)

To:		Parents	of Sixth Grade	rs				
Fron	n:		<u> </u>		Principal			_
Subj	ject:	Outdoor	Education Prog	ram	·			
educ you and our	cational know th memorab school	program at this o le experi has been	u attended a m that your child utdoor education ences in your of scheduled at	dren might poon program concided to the concided to the concident of the c	articipate an be one o entary scho	in. If you f the most ol career.	were here, beneficial This year,	
fron	n	(date)	to	(date)			•	

We shall be working in all subject areas but plan to emphasize science and social studies, doing things out-of-doors that we couldn't do in a regular classroom. The classroom teachers will be responsible for most instruction but may be assisted by student teachers and other resource people from county and governmental agencies.

To give you a more specific idea of why we expect this week to be so profitable, here is a brief listing of some of the things your children will be studying. The areas of emphasis will be: 1) Ecology; 2) Forestry; 3) Map and Compass Study; 4) Plant and Animal Communities; 5) Local History; 6) Conservation; 7) Weather; and 8) Pond Life. Evenings will be devoted to astronomy, night hikes, stalking activities, storytelling, singing, and square dancing.

We feel that through a study of these things indicated, we can achieve at least in part all of the following objectives:

- 1. Motivate children to develop positive attitudes toward learning through first-hand experiences in the natural environment.
- Provide children with many direct experiences in using scientific processes such as observing, measuring, classifying, and hypothesizing.
- 3. Make the children's regular school program more meaningful by applying the knowledge and skills acquired in the classroom to real life situations.
- 4. Cultivate children's awareness and concern for the natural environment and the effect of people's actions upon it.



Sample Letter #2

- 5. Help children to learn to live democratically and responsibly with other children and adults for the welfare of all participants.
- 6. Facilitate children's learning by improving human relations.
- 7. Improve the children's physical fitness.

The valuable citizenship training of working together to care for the camp is quite important. Group living in the cabins, the dining hall, and elsewhere can also be a valuable experience. Some worthwhile practice in table setting, bed making, and other duties relating to the keeping of facilities clean and neat also can make an educational contribution. (We hope that children will have had some previous practice in doing these things, as well as organizing their suitcases to live out of for the four nights.)

Your child's clothing and possessions should be confined to one piece of luggage, which he or she can carry. Each child will have his/her own bed but should bring blankets or bedroll or a sleeping bag, which can be in addition to the suitcase. All possessions should be clearly identified. It is not necessary to purchase new clothing. In fact, old clothing is more appropriate for most outdoor activities. It would be helpful if your child's clothing and other possessions were labeled.

The cost of this program is \$_____ per child. A check for this amount, made out to _____ (Name of School) _____, should be sent to school now. This covers renting the camp, food service and evening snacks, paying a nurse, and securing medical reimbursement insurance. If this fee imposes a financial hardship on any family, confidential arrangements can be made to underwrite all or part of it if you will contact the principal. No child should be deprived of this valuable learning experience for financial reasons.

To make the most use of our time, we are planning to leave school as soon as the buses arrive and are loaded on Monday, (Date). When arriving at school, students should leave their luggage in the front hall and proceed to their regular classroom. Luggage will be transported directly to the outdoor education center on a separate bus. Students will leave their bus one to three miles from the center and hike in. They should wear long pants and shoes, which are sturdy and well broken in.

The first meal to be served will be dinner on Monday. Therefore, it will be necessary for all students to bring a bag lunch with them on the day they leave. Names should be written on the bag as lunches will be boxed and transported on the luggage bus. Milk will be provided for this meal but be sure your child has a bag lunch for the first day. The last meal will be lunch on Friday. We expect to arrive back at school at about 1:30 p.m.

If you write to your child while at the outdoor education center, and we hope you will, please put the school's name on the envelope.

The attached permission form should be filled out and returned as soon as possible.



Sample Letter #2

Below is the list of things your child should bring and a list of things which should be left behind.

Essential Equipment

ı.	Sheets and 2 blankets, or sleeping bag	11.	Sets of underwear
2.	Two pairs of jeans or slacks	12.	Raincoat or poncho and rain hat
3.	Heavy long sleeved shirt(s)	13.	Boots or goulashes
4.	Light long sleeved shirt(s)	14.	Plastic bag or other container
5.	One warm jacket or sweater		for dirty clothes
6.	One or 2 pairs of sturdy boots or	15.	Toilet articles:
	hiking shoes		a. Toothpaste and brush
7.	Heavy socks (2 pairs)		b. Soap and soap dish
8.	Light socks (2 pairs)		c. Bath towel
9.	Handkerchiefs		d. Wash cloth
10.	One pair of pajamas		e. Comb
		16.	Gloves and hat (in winter)
<u>Opti</u>	onal Equipment		
1.	Small pillow and case	6.	Stationery and stamps
2.	Compass	7.	Binoculars
3.	Small games	8.	Musical instrument
4.	Flashlight	9.	Chapstick (essential in winter)
5.	Camera and film	10.	Shower cap
J.	Comola and IIIm	10.	ononer eap
Thir	ngs Not to Bring		
11111	iga not to bring		·
• "	•		•

1.	Soft drinks in throw-away bottles	7.	Radios, tape players,
2.	Sheath or pocket knives		phonographs
3.	Food, especially chewing gum	8.	Sandals (for outdoors)
4.	Matches	9.	Short pants
5.	Firearms	10.	Curling iron
6.	Money	11.	Hair dryer *

Since cabins generally are not equipped to accommodate hair dayers, not more than one per cabin can be permitted.



Office of the Deputy Superintendent of Schools

OUTDOOR EDUCATION PROGRAM

MONTGOMERY COUNTY PUBLIC SCHO Rockville, Maryland	OLS	-Parental Permission-
Instructions to the parent: Please complete this completed form to the health assistant or nurse		turn it to the teacher. The teacher will deliver the at the outdoor education center.
		education program described in the accompanying
Child's Name		Sex
Address		Birth Date
School		
In the event I cannot be reached in an emergenc center to secure proper treatment for my child.	y, I hereby g	ive permission to the staff of the outdoor education
Please check if indicated:		
PROPERLY LABELED CONTAINER, (CORRECTL	D TO FURNISH MEDICATION, IN THE ORIGINAL Y AUTHORIZED ON MCPS FORM 525-13. NO MPLIANCE WITH THIS REGULATION.)
required, attach MCPS Form 525-13, Au Indemnification Agreement, MCPS Form	thorization i n 525-14, An ication Agree	he/she needs medical treatment. (If adrenalin is To Administer Prescribed Medication — Release and paphylactic Reaction Resulting From An Insect Sting tement, and Montgomery County Health Department ase For Treatment.)
My child has other special conditions yo	s which I have a should be a	ve indicated on the attached menu form (please attach).
The following medications are stocked at the ou	tdoor educat f, they might ate so below:	tion center and may be given to students if, in the be helpful. However, if you do not want your child
Date of last tetanus shot	`\	<u></u>
Today's date	`.	Parent's Signature
Today 3 date	<i>`</i> ;	Mother (Work)
Charle base if a super letter is a super letter in the super lette	(Home)	Father (Work)
Check here if your child is serving as a High School Student Assistant.		Parents' Telephone Numbers
	(Name)	(Number)
High School your child attends:		Alternate Emergency Telephone Number
		Name of Family Physician
		Telephone Number of Physician

MCPS Form 345-7, Revised November, 1982



	Lathrop E. Smith Environmental Education Center MONTGOMERY COUNTY PUBLIC SCHOOLS Rockville, Maryland			OUTDOOR EDUCATION PROGRAM REPORT OF INJURY OR ILLNESS			
OUTDOOR ED	UCATION CENTER		SCH00L				
Dats and Time of Accident or Illness	Name of Patient, Home Address, Age and Sex	Nature and Cause of Injury or Illness	Activity and Supervisor	Witnesses	Disposition of Patient Including Name/Address of Doctor or Hospita		
		·					
			·				
		· a					
SIGNATURE C	l Prurse	<u> </u>			DATE		
SIGNATURE C	F PE'NCIPAL (OR TEACHER IN CI	HARGE)	·,	· · · · · · · · · · · · · · · · · · ·	DATE		
SIGNATURE C	F ON-SITE COORDINATOR				DATE		

APPENDIX I

Rockville, Ma	m and Instruction PUBLIC SCHOOLS ryland	OUTDOOR EDUCATION PROGRAM ATTENDANCE AND CHARGES VOUCHER				
OUTDOOR EDUCATION CENT	ER		· · · · · · · · · · · · · · · · · · ·			
SCHOOL		DATES From	То			
NUMBER OF PUPILS IN ATTENDANCE	BOYS	GIRLS	TOTALS /			
Monday Night						
Tuesday Night	·	;				
Wednesday Night	o*		<u>.</u>			
Thursday Night	·		• .			
. ·		GRAND TOTAL				
	AVERAGE DAILY ATTENI DAYS (GRAME 1 DYAL DIV	DANCE OF PUPILS FOR FOUR VIDED BY 4)				
		meals) @ ¾ fee				
Studer Studer Additional charges for Total Amount due Accounting D	nts for three days (2 nights, 6 nts for two days (1 night, 3 n	6 meals) @ ½ fee	\$			
Studer Additional charges for Total Amount due Accounting D	nts for three days (2 nights, 6 nts for two days (1 night, 3 night	6 meals) @ ½ fee	\$			
Studer Studer Additional charges for Total Amount due Accounting D (School will be billed for this amo	nts for three days (2 nights, 6 nts for two days (1 night, 3 numbers) ivision ount).	6 meals) @ ½ fee	\$			
Studer Studer Additional charges for Total Amount due Accounting D (School will be billed for this amo	nts for three days (2 nights, 6 nts for two days (1 night, 3 night	6 meals) @ ½ fee	\$			
Studer Studer Additional charges for Total Amount due Accounting D (School will be billed for this amo	nts for three days (2 nights, 6 nts for two days (1 night, 3 nivision ount). Principal Manager Director	6 meals) @ ½ fee	\$ \$			
Studer Studer Additional charges for Total Amount due Accounting D (School will be billed for this amo Signed Signed	nts for three days (2 nights, 6 nts for two days (1 night, 3 nivision ount)	6 meals) @ ½ fee	\$			
Studer Studer Additional charges for Total Amount due Accounting D (School will be billed for this amount due Signed Signed	nts for three days (2 nights, 6 nts for two days (1 night, 3 nivision ount) Principal Manager Director On-site Coordinator	6 meals) @ ½ fee meals) @ ¼ fee Date Date	ssss			



APPENDIX J

Feedback on the Outdoor Education Center Staff and Facility

Scn	оот –		Princ	ipai		
Out	door	Education Center	On-si	te Coordinato	or	
Dat	es at	Center	Form	completed by		
to	to receive your reaction to the sta		The outdoor education program, it would be helpful for this office reaction to the staff and the facility. Please complete this n it to the outdoor education office. Satisfactory Unsatisfactory rival, the cabins were clean. rival, the other facilities clean. ermanent camp staff was generally			
			<u>Sa</u>	tisfactory	Unsatisfactor	<u>ry</u>
I.	Fac	ility				
	1.	On arrival, the cabins were clean	•			ť
	2.	On arrival, the other facilities were clean.			·	
	3.	The permanent camp staff was gene- helpful and cooperative.	rally			
II.	Foo	od Service	•			
	1.	The cafeteria staff was generally helpful and cooperative.		· ·	· <u> </u>	
	2.	The quantity of food served:				
		Breakfast				
)		Lunch				
		Dinner		,		
	3.	The quality of food served:			•	
		Breakfast				
	٠	Lunch				
		Dinner		· ·	· · ·	•
Ю	4.	The menus:	**			-
	·	Breakfast		· ·		
		Lunch				•
		Dinner :				
					and the second s	



Satisfactory Unsatisfactory

III.	On-	site Coordinator			
	1.	The on-site coordinator informed y routines and procedures followed a outdoor center.			
	2.	Adequate support was provided to to enable effective planning.	eachers		
٠,	3.	You and the teachers were made awa area's resources to support the in program.			**************************************
	4.	The on-site coordinator provided in tional assistance to children as r		·	·
	5.	The equipment on hand at camp was able and adequate for your program	avail- ृ	Marian de la Carlo	· ·
	6.	The on-site coordinator worked with staff in a supportive and harmonion			
IV.	Nur	se			
	1.	The nurse was available and helpfu medical needs of children and staf	l for f.		
•	2.	The nurse aided with routine matter	rs.	<u>``</u>	
v.	Bus	Service			
	1.	The bus service was adequate to you	ur needs.		
	2.	The bus driver was friendly and he	lpful.		
Did y	ou e	valuate your program this year?	c	(Yes)	(No
Comme	nts ——	and suggestions concerning this year	r's progr a m	would be ap	preciated:
		ggest any ways the outdoor education p			tter assis-
		s plan and budget for next year. pl	ease provide	the inform	ation
Curre	nt 6	th Grade Enrollment Num	ber of days	substitute	time used _
				night stipen 4 nights =	
outdo	or e	other students attending ducation program (Do not igh school students.)		Thank y	ou.
	-		40		



APPENDIX K

Equipment and Supplies for Outdoor Education

Following are 3 lists of equipment and supplies that may be brought from school, depending upon the instructional program and what the outdoor education center inventory includes. The first list is science equipment, much of which will be available on site. The second is more general and will have to be provided by each school. The third is a list of maps which will be useful to have at the center. The Outdoor Education Center inventory list will be distributed by the on-site coordinator at the first planning session with each school. Check with the coordinator if there's any question about what is available.

Animal Cages, small
Animal Live Traps, small
Barometer, aneroid
Biltmore Sticks
Compasses, magnetic
Flag
Funnel
Goggles
Hygrometer
Insect Pins
Insect Cages
Insect Mounting Boards

Adapter Plug
Aluminum Foil
Art Supplies
Baggies
Books
Camera, 35 mm
Collecting Jars
Contact Paper, clear
Ditto Machine
Extension Cord
Filmstrip, Slide, &
Opaque Projectors
Games (for free time,
rainy days)

Jars, killing

Magnifying Glasses
Lamps, goosenecked
Medicine Droppers
Microprojector
Microscopes
Miscroscope Slides
Nets, dip
Nets, insect
Nets, plankton
Petri Dishes
Rain Gauge

Shove1

Kleenex Tissues
Marking Pens
Masking Tape
Movie Projector and
Take-up Reel
Musical Instruments
Pencils
Plaster of Paris
Post Cards and Stamps
Projection Screen
Record Player
Records
Recreational Equipment
Rubber Bands

Soil Auger
Tape Measure
Telescope
Test Tubes
Thermometer, maximumminimum
Thermometer, small
standard
Tweezers
Trays, white enamel
Wind Meter

Song Books (Outdoor Sing)
available from
Smith Center
Student Folders
Student Notebooks
Twine or String

Glenkirk - Gainesville, VA N3845-W7730/7.5 and Thoroughfare, VA N3845-W7737.5/7.5 Summit Lake - Blue Ridge Summit, PA N3987.5-W7722.5/7.5

Mar-Lu-Ridge - Point of Rocks, MD-VA N3915-W7730/7.5

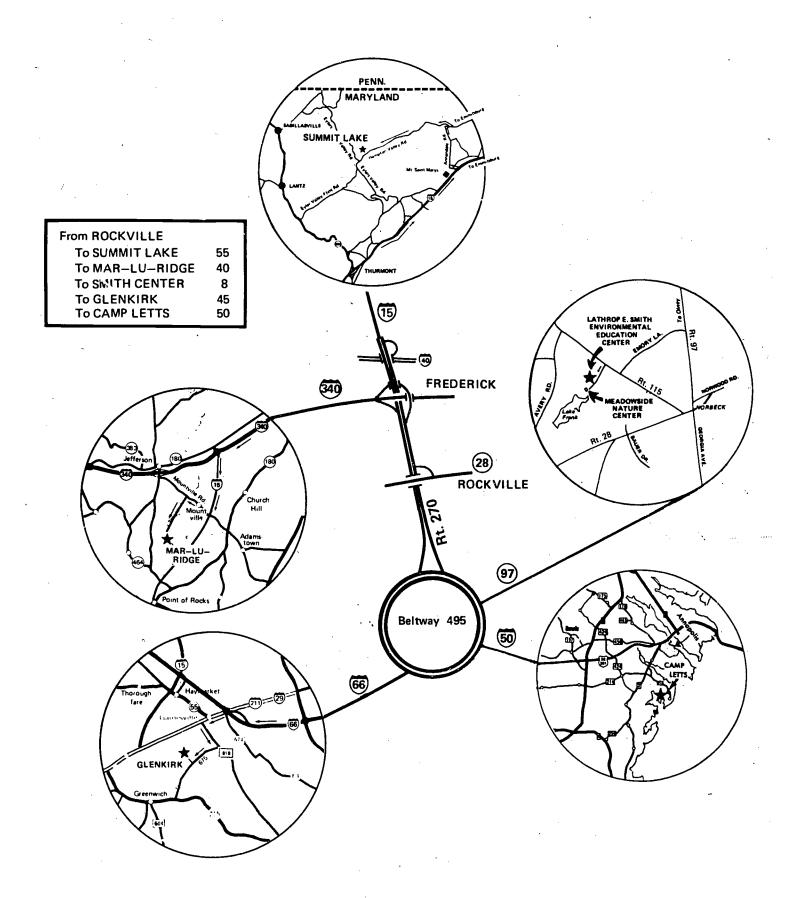
Smith Center - Reprint available at center

Camp Letts - South River, MD N3853.5-W7630/7.5

Topographical quadrangle maps are available from the Branch of Distribution, U.S. Geological Survey, 1200 South Eads Street, Arlington, VA 22202. The price for maps is \$1.25 each. Nautical chart #550 covers the vicinity of Camp Letts and is available from National Oceanographic & Atmospheric Administration Chart Sales, 650 LaFayette Avenue, Riverdale, MD 20840. If a teacher intends to use nautical charts for educational purposes, they may use school stationery and request a 40 percent discount. Cost of chart with discount is \$1.95.



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DIRECTIONS TO OUTDOOR EDUCATION CENTERS

.Summit Lake Outdoor Education Center

From the Washington Beltway (I-495), take exit #17 or #19 and go north on I-270. Near Frederick, take Route 15 north. Near Thurmont, in the vicinity of Royer's Restaurant, bear right, then turn left under Route 15 onto Route 550. Continue on Route 550 for approximately 3 miles and turn right onto Eylers Valley Flint Road. Follow the signs to Eylers Valley Chapel and Summit Lake.

.Mar-Lu-Ridge Outdoor Education Center

From the Washington Beltway (I-495), take exit #17 or #19 and go north on I-270. Near Frederick, take I-70 west towards Hagerstown 1/2 mile, then bear right onto Route 340 to Route 15 south. At Mountville Road, turn right and go about 1/2 mile to Mar-Lu-Ridge sign. Turn left and continue for 2 miles to camp.

.Glenkirk Outdoor Education Center

From the Washington Beltway (I-495), take exit #9 and go west on I-66 to Route 29 into Gainesville. Turn left in Gainesville on Route 619, the first left after the railroad tracks. In about a mile, turn right on Glenkirk Road, Route 675. In a little more than a mile, turn right at Glenkirk sign into camp property before you reach the dam.

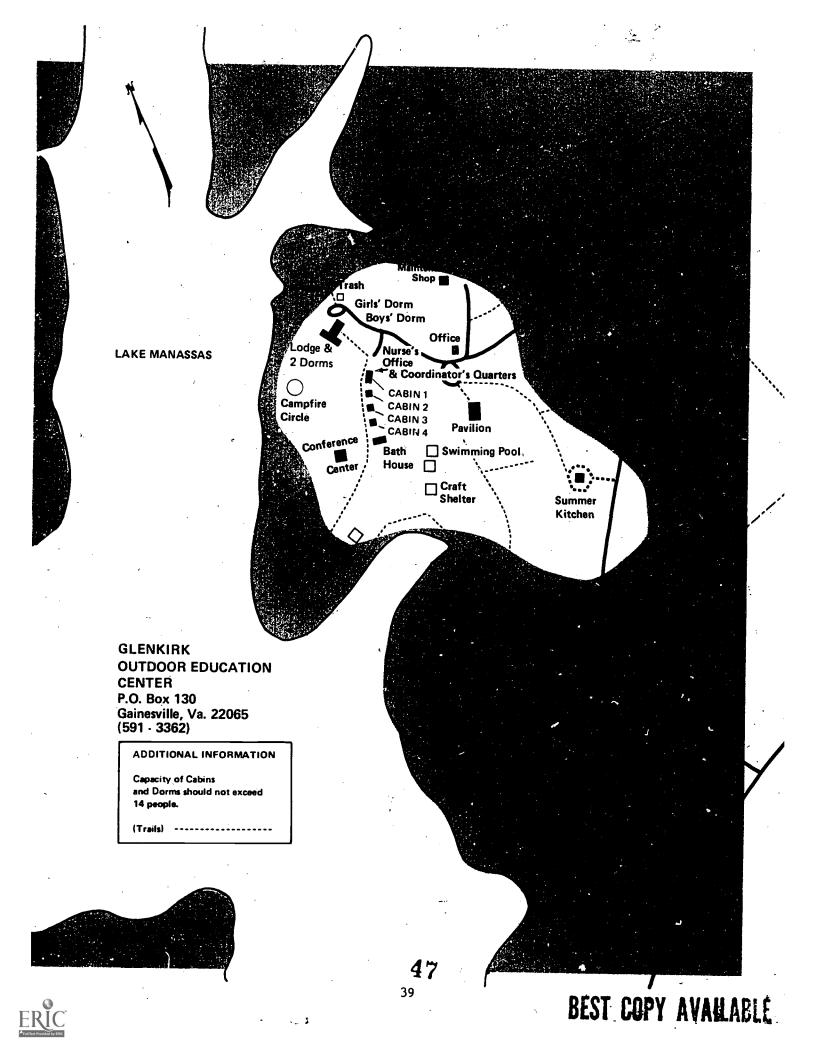
.Camp Letts Outdoor Education Center

From the Washington Beltway (I-495), take exit #19-A and go east on Route 50. Turn right onto Route 424 and then left on Route 214. Pass 3 traffic lights and look for Camp Letts gate on right before you come to Century 21 Real Estate office. Follow dirt road to facilities.

Lathrop E. Smith Environmental Education Center

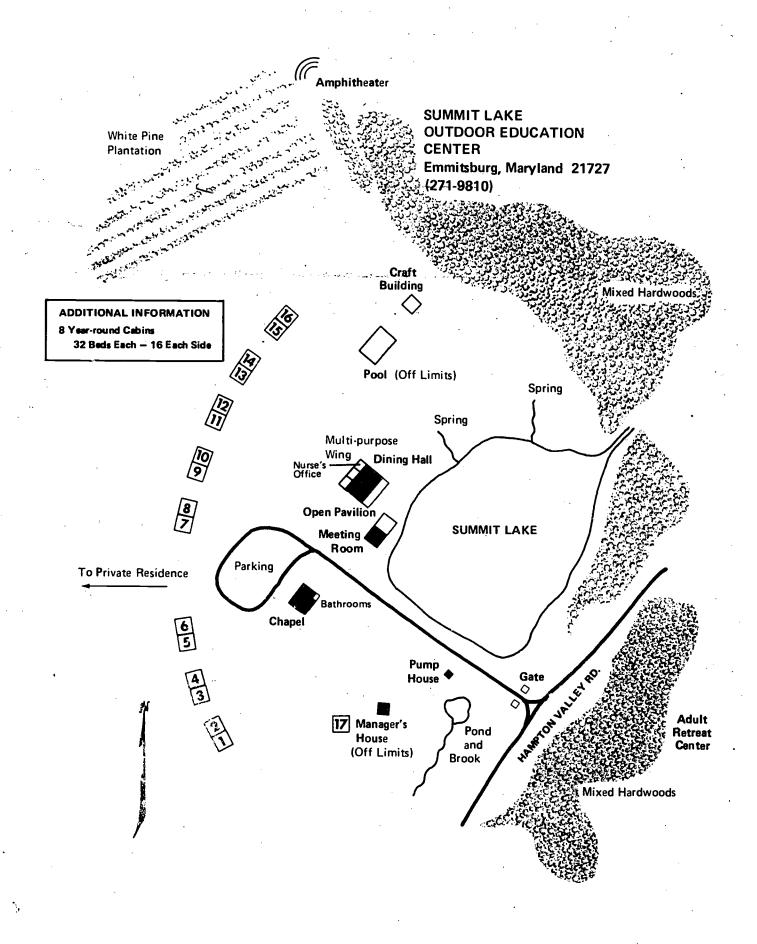
From the Washington Beltway (I-495), take exit #21 (Georgia Avenue) or exit #20 (Connecticut Avenue) north past Rossmoor Leisure World globe. Turn left on Norbeck Road (Route 28). In less than 1/4 mile, turn right on Muncaster Mill Road (Route 115). Go 1 1/2 miles to Meadowside Lane. Turn left into park, then right at the Lathrop E. Smith Environmental Education Center sign.





MAR-LU-RIDGE **OUTDOOR EDUCATION CENTER** Jefferson, Maryland 21755 (301-874-5544) ADDITIONAL INFORMATION 14 Beds per Cabin (TRAILS)





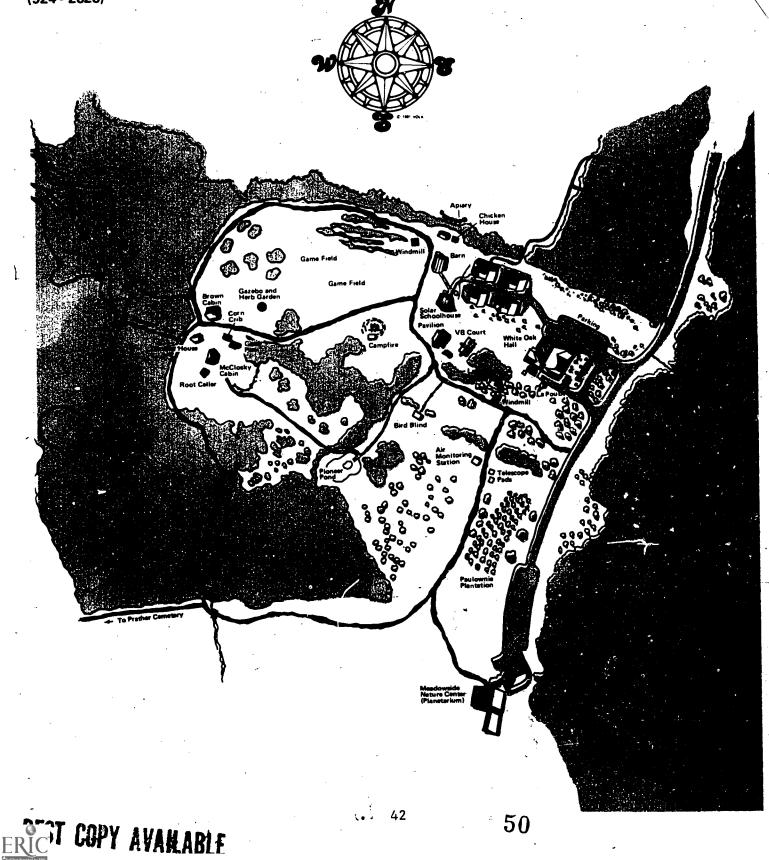
LATHROP E. SMITH ENVIRONMENTAL EDUCATION CENTER

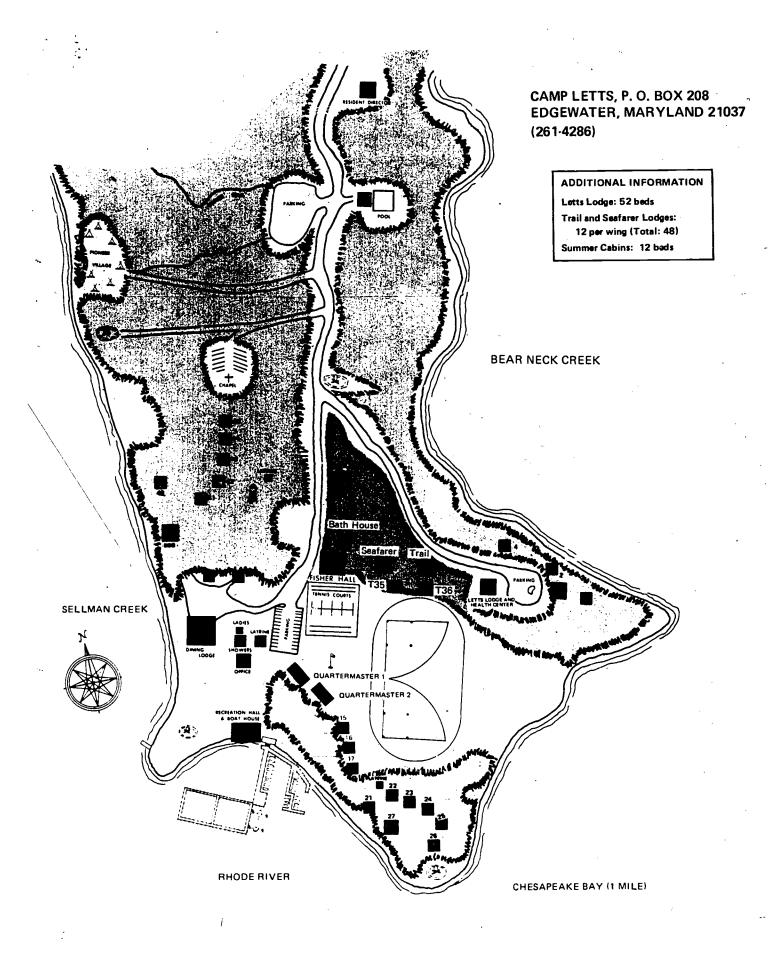
5110 Meadowside Lane Rockville, Md. 20855 (924 - 2626) Additional Information

8 Dorms

8 Double beds ea. dorm

= 128 capacity



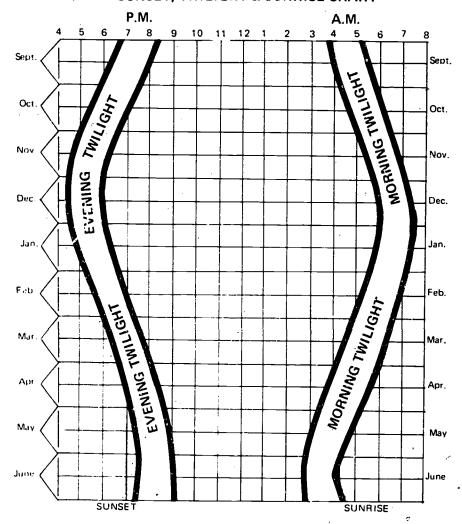




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SUNSET, TWILIGHT & SUNRISE CHART



The above chart showing sunrise, sunset, and twilight times may aid you in planning late afternoon and evening activities. Twilight occurs twice each day, after sunset and before sunrise. Even though the sun is not in the sky during twilight, its rays are lighting up dust particles and making it difficult to observe astronomical bodies. Duration of twilight varies slightly during the year and is longest in late June.

