

C&O Canal Association

along the towpath

concerned with the conservation of the natural and historical environment of the C&O Canal and the Potomac River Basin

VOLUME XV

APRIL 1983

NUMBER 2

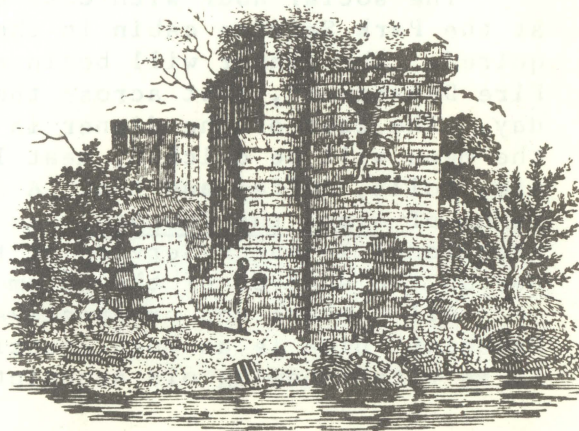
THIS IS IT!

ASSOCIATION-SPONSORED VOLUNTEER PROJECTS BEGIN

The first Association-sponsored volunteer project in the C&O Canal National Historical Park will take place on May 1, 1983 beginning at 9:00 AM at the abutment of the old Alexandria aqueduct (mile 1.1). Association volunteers, under Park Service supervision, will remove from the old aqueduct intruding vegetation which threatens to destroy foundations and walls and disrupt masonry. Participants will be uprooting saplings, removing vines from cast-iron railings, digging grass out of cracks and piling the detritus neatly by the towpath, from which point the Park Service will remove it. Members may arrive at any time, and the project will last as long as anyone cares to work.

Come early and stay late. Bring your lunch and a prospective member. If we can execute volunteer work as intently as we have been discussing it, the Association's volunteer program will be off to a fine start. Remember that the success of vegetation-removal projects like this one may obviate the use of herbicides in the Park.

Participants should meet on K Street underneath Key Bridge; drivers should not park in spaces indicated as reserved for Potomac Boat Club members. Members wanting further information should call Michele Carsrud, project leader, at 301-495-8585 evenings.



Help rescue the Alexandria aqueduct in Georgetown.

THE 1983 JUSTICE DOUGLAS HIKE

The Association's 29th annual reunion (The Justice Douglas) hike will begin at 10:00 AM on April 23, 1983 at the former Paw Paw brickyard of the C&O Canal Company (mile 156.2), will proceed downstream to the southern entrance to the Stickpile tunnel of the abandoned Western Maryland railroad right-of-way (mile 151.2), and will return upstream to Paw Paw, a total distance of about ten miles. Hikers may make their way along the towpath through the tunnel or on the trails

over tunnel hill. The hike will be followed by a social hour and then by a dinner for those making reservations in advance. Participants wishing to camp may do so on both April 22 and April 23 in the old brickyard. Drivers should park in the lot next to the brickyard.

Hike participants will encounter the Paw Paw tunnel, the 3,118-foot engineering masterpiece that reduced six miles of canal to one along the tortuous Paw Paw bends of the Potomac River. Although the towpath in the tunnel is in good condition and hikers can feel their way by touching the railing, a flashlight is useful to make rope burns, vertical shaft locations and mineral deposits visible. Participants walking over tunnel hill in possession of a good map and compass can trace the route of the tunnel from above. In addition to the tunnel, hikers will pass Locks 66, 64 $\frac{2}{3}$, 63 $\frac{1}{3}$, 62 and 61, all wood-lined to save money, and a number of cliffs and rock folds. Hikers will also pass Twig Hollow, just above Lock 61, a ravine which drains, through a topographical rarity, parallel to the Potomac but in the opposite direction. Participants who desire lunch, containers for water and extra clothing for negotiating the tunnel should bring these items with them.

The social hour with cash bar will take place between 4:00 PM and 5:30 PM at the Park Service cabin in the Paw Paw brickyard. Reservations are not required. The dinner will begin at 6:00 PM at the Paw Paw, West. Va. Volunteer Fire Department, just across the River from the site of the other events of the day. The cost of the dinner is \$7 per person, with reservations required. On the menu will be chicken, meat loaf, peas, string beans, mashed potatoes, cake, pie, rolls, coffee and tea. A reservation form for dinner is included in this issue of Along the Towpath. Association member Gilbert Gude, head of the Congressional Research Service at the Library of Congress, will speak at the dinner on the subject of the Potomac River Basin College Consortium.

All members and prospective members and their friends are welcome. The "reunion" hike is as much associated with producing new Association members as it is with renewing old acquaintances. (See page 16 for directions to Paw Paw.)

RABIES PREVENTION

According to the C&O Canal Superintendent's Weekly Reports, two raccoons found in the past year at Great Falls were killed and confirmed to be rabid. Several other dead raccoons have been found in the canal. On February 23, 1983, a rabid raccoon was killed in Four Locks. For the past year raccoons in Northern Virginia and the section of Maryland adjoining the C&O Canal have been reported heavily infected with rabies. There have been six rabid raccoons reported in Montgomery County and over 100 rabid raccoons in Fairfax and Prince William Counties.

The following information from the Center for Disease Control and the Park Service is presented to help park visitors avoid a rabies catastrophe:

Rodents (such as squirrels, hamsters, guinea pigs, gerbils, chipmunks, rats and mice) and lagomorphs (including rabbits and hares) have not been known to cause human rabies in the United States; their bites almost never call for antirabies prophylaxis. Carnivorous wild animals (especially skunks, raccoons and foxes in the C&O Park) and bats, however, have been the cause of most of the human rabies in the United States since 1960.

Rabies is transmitted only by introducing the virus into open cuts or wounds in skin, or via mucous membranes. Exposure consists of bites, or scratches, abrasions, open wounds or mucous membranes contaminated with saliva or other poten-



tially infectious material, such as brain tissue, from a rabid animal. Casual contact, such as petting a rabid animal, by itself does not constitute exposure. Although an unprovoked attack is more likely than a provoked attack to indicate that the animal is rabid, signs of rabies in wild animals cannot be interpreted reliably; therefore, any wild animal that bites or scratches a person should be killed at once and its brain submitted for examination for evidence of rabies.

Park visitors are advised by the Park Service to keep pets on a leash at all times, and to not approach or touch raccoons, skunks, foxes, bats, stray pets or dead animals. If bitten or scratched by an animal, assume exposure to rabies. Kill the animal if possible and arrange for examination of its brain. Wash the wound well with soap and water and seek medical assistance immediately.

NOTES FROM MINUTES OF THE C&O CANAL NHP ADVISORY COMMISSION MEETING OF DECEMBER 4, 1982

Development Concept Plans

Georgetown: The Advisory Commission passed a motion asking the National Park Service to begin formulating a "general management plan, in essence a Development Concept Plan," for the Georgetown area of the Park. Some of the elements to be considered in the plan are commercial development pressures, the possibility of more interpretive markers, improvement of the area along the Potomac between the Washington Canoe Club and the Alexandria aqueduct abutment, and the appropriateness of the present series of "noisy" concerts on the canal.

The Potomac Boat Club and the Washington Canoe Club would like to "curtail" parking between Canoe Club property and the Alexandria Canal aqueduct, plant and maintain grass along the River and build a wooden judges' stand before July 1983. An Advisory Commission committee is studying the proposal.

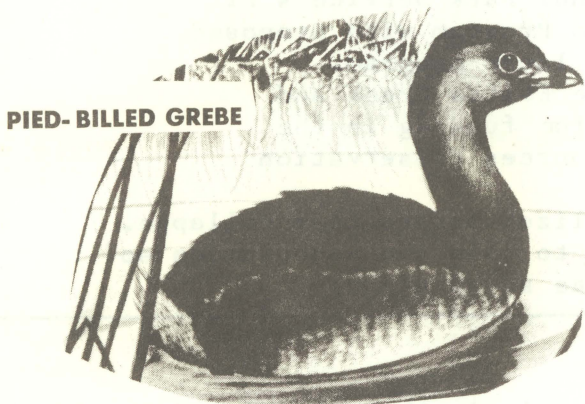
North Branch/Cumberland: The Commission discussed various details of this plan. The Allegany County Commission members pointed out that there is no parking area for canal

visitors at the Western Maryland railroad station in Cumberland, although the building itself now belongs to the City. They also proposed rewatering the canal both at North Branch and at Evitts Creek, and the establishment of a floating barge. Superintendent Stanton will review the suggestions and bring the plan again before the Advisory Commission.

Williamsport: The Commission voted to delete "all references" to the Bolman bridge and the boat ramp from the Williamsport plan. The Commission had previously voted to add to the plan language specifying that an alternative route would be "agreed upon" by the town and the NPS before the bridge would be closed. The plan had also contemplated relocation of the boat ramp at some time. The Commission's latest action was a response to the fears of some Williamsport boatmen that the plan threatened their access to, and use of, the boatramp.

The Bolman bridge "is in excellent condition and could last indefinitely."

Monocacy: This plan will be "worked up by the Park staff and is in a very preliminary stage." The Commission would like to see staff proposals in writing. The Commission's Planning and Projects Committee reviewed a "proposed preliminary plan," recommended its approval, and suggested that river access to the lower Monocacy be denied by a gate under the aqueduct, the boatramp be moved to higher ground at the end of an old service road, and the picnic area be moved to higher ground.



Aqueduct Stabilization

The Commission passed a motion to bring the serious condition of the Monocacy, Licking Creek and Evitts Creek aqueducts "to the attention of the Secretary of the Interior, the general public and the US Congress, and /to/ urge that everything possible be done to save them." Superintendent Stanton stated that these three aqueducts "are in danger of collapse /and/ are priorities one, two and three in the Park's program; they, /however/ are not considered a priority /National Park/ servicewide." Conococheague aqueduct also badly needs repair (see Along the Towpath, XV, 1, p. 5). In response to a question, the Superintendent said that restoration of the aqueduct "would cost \$1 million per arch."

Secretary Watt Comes Through For the Aqueducts

The C&O Canal NHP had received \$150,000 in FY 1983 funds for stabilization of the Conococheague aqueduct by the time of the Advisory Commission meeting. On December 17, 1982, Chairwoman Carrie Johnson wrote to Interior Secretary James Watt, bringing the matter of the deteriorating aqueducts to his attention. In a letter bearing the signature of the Secretary, the Interior Department responded:

We have looked into the status of the three aqueducts you discussed in your letter and are glad to report that the interim stabilization of the Licking Creek aqueduct is proposed in the National Park Service's FY 84 Cultural Resources Preservation Program with proposed funding for full restoration in a later program.

Interim stabilization for the Evitts Creek and Monocacy aqueducts is identified for funding in the Park Service's FY 85 Cultural Resources Preservation Program.

Hopefully, the aqueducts will be stabilized before they collapse. Perhaps we can persuade Secretary Watt to join the Association so he can savor with companions what he has saved alone.

The Riverbend Park Boatramp

Both Maryland (because the Potomac River is in that state) and the US Army Corps of Engineers (because the River is navigable) have the authority to issue (or deny) permits for boatramps at Riverbend (formerly Jellystone) Park, on the West Virginia shore near Dam No. 5. A 1976 permit issued by the Corps required that "no additional boat docks be installed," that "the existing boat ramp be filled," and that "no development occur within an area of 200 feet running parallel to the mean high water shoreline." Undaunted, the Riverbend Park applied for a boatramp permit from the Maryland Dept. of Natural Resources. A state permit was granted in 1981 and was later rescinded, and another permit was issued in 1982. Apparently, the state denied a request for a public hearing on the permit request (see 1982 issues of Along the Towpath for related reports). Riverbend has not requested a new permit from the Corps.

Meanwhile, an NPS "investigation in the fall of 1982 found that many structures and other appurtenances had been built right along the shoreline, some even cantilevered over the bank of the Potomac River well within the 200 foot area /of/ no development, and that there were three developed boat ramp areas."

The Commission voted to "insist /that/ the Corps enforce the terms of its 1976 permit," and, in the resolution, added: "We note that lax enforcement of the permit, a milestone in Federal efforts to protect the Canal property from 'adverse effects' on the south bank of the Potomac, would be a clear signal that it had 'no teeth.' Such a perception would make it difficult, if not impossible, to protect the Canal environment from future 'adverse effects' along the south bank of the Potomac."

The Route 51 Relocation

The Commission approved a motion to "advise the NPS to issue the relocation permit containing the provisions to protect the canal park...." The relocation of one mile of Maryland route 51 between North Branch and Spring Gap was made possible by the Western Maryland Railroad's abandonment of its right-of-way in the area. The latest details of the approved plan are that the new roadway will be only 22 feet wide with four-foot wide shoulders; that the pipes carrying runoff from the existing road into the canal will be retained, with no increase in runoff expected; that the wall separating the road and the park will be painted dark brown; that the steep, rocky slope will be vegetated; that guard rails with weathering steel will be used next to the road; that a five-foot high, vinyl-coated, chain link fence will be placed along the roadway; that "some commercial structures at the northern end...will be removed;" that the project will eliminate the road to Lock 72 in favor of access at Spring Gap; and that the Blue Springs will not be disturbed.

Seneca House Rehabilitation Center Expansion

Seneca House, a private institution for "rehabilitation" of "de-toxified, ambulatory" persons of "all chemical dependencies" on Riley's Lock Rd. within the C&O Canal NHP, was granted approval of its request to erect a 1400 square-foot temporary building next to its existing building. Fearful of approving an eyesore for the Park, and of setting a precedent, "because former landowners exercising retention rights have not been allowed to enlarge or add structures on Park property," the Commission voted "That the Commission approves this with the stipulations that it is a temporary building on NPS property; that when the permit is renegotiated, a provision be written in that this building must be removed at Seneca House's expense whenever the group relocates or its permit is not renewed; that this should not be considered a precedent, and that other situations should be considered on a case-by-case basis."

The "modular" building will be one-story, not visible from the towpath, and will be finished in "earthy colors."



Primula

veris

(Clusius)
(1601)

The Potomac River Pedestrian Bridge at Harpers Ferry

The Planning and Projects Committee of the Advisory Commission has reviewed four proposals for a pedestrian bridge across the Potomac at Harpers Ferry. The Committee did not recommend adoption of the proposal (plan 2-B) which would have the "least impact on the canal and towpath," and which would be the "easiest and least strenuous for hikers and bikers." Instead, the Committee suggested a plan which provided "the fewest number of steps and the largest slope for a ramp incline, and...the greatest possible conformance to the historical canal scene." The suggested plan is to bring the "access to the pedestrian bridge under the railroad bridge with a walkway along the berm side of the reconstructed canal wall leading to the existing footbridge to the Harpers Ferry Road."

The Committee further recommended that guard rails on a widened Harpers Ferry Road in this vicinity "have some highly visible safety feature warning motorists." Finally, the Committee recommended further "engineering advice, and review and discussion."

The Lander Shop Relocation

The Commission approved the removal of the Park Service maintenance shop from Lander to a site on Pleasantville Road, 850 feet off the Harpers Ferry Rd., one-half mile from the canal north of Lock 34. The Park Service is delighted with this new location (which is not visible from the towpath) and will restore the Lander (Lock 29) area to its "historic scene."

An unusual aspect of this relocation is that it was undertaken after approval by the Planning and Projects Committee; the Commission approval was ex post facto. The Committee offered the following rationalization for this breach of procedure in its report:

Although the full Advisory Commission had not the opportunity to visit and discuss the proposed new location of the shop, the committee members agreed that in this one instance it was important to proceed with the relocation immediately so that concrete and brick work be accomplished before freezing weather....

It is to be well noted that the committee emphasizes that such haste with the go-ahead on this project is not to suggest that a precedent has been set for any future programming of planning or activities. Due consideration of the regular routine decision-making process is to be observed and continued on all matters in the future."

Other Items

The State of Maryland is repairing a problem with the stormwater runoff system of the Cabin John bridge (mile 9.4). The problem has caused erosion in the Park.

The Commission approved a resolution "sending greetings and encouragement to the Citizens Advisory Council on the Upper Delaware River."

The National Capital Region of the Park Service is planning to produce catalogs of Park needs to help inspire contributions.

There was an Advisory Commission meeting on March 5, 1983 in Brunswick, and the next meeting is scheduled for June 18, 1983 in Cumberland.

Along the Towpath is published in January, April, July and October by the Chesapeake and Ohio Canal Association, a non-profit organization, P.O. Box 66, Glen Echo, MD 20812-0066.

Editor is Robert Greenspun, 413 W. Windsor Ave., Alexandria, VA 22302. The editor welcomes correspondence and contributions. Requests for publication of advertising should be sent to the Board of Directors at the Association address.

Association officers for the 1983-1984 year are:

President: Bruce Wood, 5703 40th Ave., Hyattsville, MD 20781

First Vice President: Bill Davies, 125 W. Greenway Blvd., Falls Church, VA 22046

2nd VP & Level Walker Chmn: Lyman Stucker, 2811 Farm Rd., Alexandria, VA 22302

Secretary: Kay Seward, 5103 Acacia Ave., Bethesda, MD 20814

Treasurer: John Chandler, 6718 Persimmon Tree Road, Bethesda, MD 20817

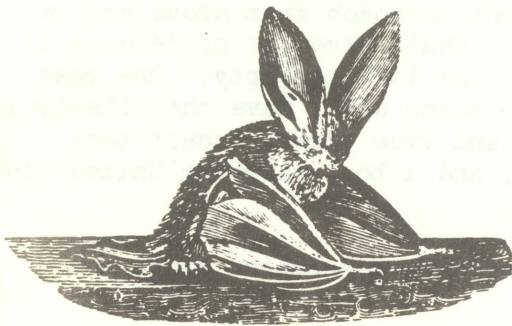
Information Officer: Orrin Long, 3321 Hartwell Court, Falls Church, VA 22042

Association Dues: One year \$8, patron \$15.

Membership includes subscription to Along the Towpath.

ENDANGERED BATS IN THE PARK

A female Indiana bat (Myotis sodalis, a species on the federal endangered species list), was found in Round Top Mine #4 (west of Hancock in the C&O NHP) on August 1, 1979, during a study of bat populations in Maryland (Gates, et al., Distribution and Population Sizes of Indiana Bats/Cave Dwelling Bats in Maryland Caves, 1981). Only three Indiana bats were found in two of the 15 caves studies. The Indiana bat has been found previously in this Round Top cave. Of 148 caves



The Long-Eared Bat

in Maryland, only ten, according to the study team, are of biological significance to cave dwelling bats, and one of these ten is Round Top Mine #4. Gates and his team members report that "the cave ecosystem is very fragile, and many species of cave dwelling bats are easily disturbed by speleological activities. Such disturbances can decrease the bats' survival and reproductive success. Pesticides play a role in the decline of insectivorous cave-dwelling bats as well. Intake of contaminated prey items has been directly linked with mortality of bats in the field." The Round Top cave is a home of other, more common, bats also, and, according to Park Superintendent Stanton, the big brown bat (Eptesicus fuscus) is found in Paw Paw tunnel from time to time.

TREASURER'S REPORT FOR 1982

Checking account balance, January 1, 1982	\$ 1,812.17
---	-------------

Receipts during calendar 1982:

Dues	\$ 2,681.50	
Reunion Hike Receipts	1,215.75	
Heritage Walk Receipts	630.00	
Annual Meeting Receipts	552.08	
TOTAL	\$ 5,079.33	\$ 6,891.50

Disbursements and expenses during calendar 1982:

Reunion Hike	\$ 1,135.02	
Heritage Walk	606.28	
Annual Meeting	566.00	
Newsletter	1,145.11	
Level Walkers	38.60	
Contributions	35.00	
Misc. postage and printing	93.94	
TOTAL	\$ 3,619.95	\$ 3,271.55

Checking account balance, December 31, 1982	\$ 3,271.55
---	-------------

Savings account balance, January 1, 1982	\$ 4,020.94
Interest received calendar 1982	215.28
Savings account balance, December 31, 1982	\$ 4,236.22

History and Engineering

CANAL COMPANY REGULATIONS--TEXT AND INTERPRETATION

[The punctuation and diction of the original text has been modified slightly to allow the reader to pay closer attention to meaning--Ed.]

The order of passing locks: In approaching a Lock, the boat which first arrives within 150 yards thereof and not in any lock shall have a preference. If several boats arrive, at or near the same time, within that distance of any lock, they shall have a right to pass in the order of their arrival within that distance: provided, that if two boats at or near the same moment approach from above and below within such distance of any lock, the descending boat shall have the preference if the lock be full of water, and the ascending boat if the lock be empty. One boat having passed from above through a lock, a boat from below shall have the liberty to pass up before another boat be admitted from above, and vice versa, except that packet-boats shall have preference of freight-boats, and a boat carrying United States Mail, of all others.

The preference granted to packet boats by the preceding regulation shall not extend to such as are less than 60 feet long.

In the canal operating days there were "timing markers" 150 yards above and below the locks so that the boatmen and lock-keepers would have a reference mark to indicate which boat had preference. The last marker to disappear a short time ago was above Lock 39. The distance to the markers seems to have been taken from the quion of the upper gate recess. Descending boats had the preference in passing through a lock because they were normally heavily laden, whereas the upstream bound or "light boats" were not. Actually, ~~an~~ unloaded boat is normally harder to steer because it provides more freeboard, or exposed boat above the water line, thus being more easily subjected to winds. It was the normal procedure on most canals to give preference to packet boats. There do not ~~seem~~ to have been enough on the C&O Canal to have created too much of a problem for freight-boat captains. The reference to the carrying of the U.S. Mail is interesting; does anyone have further information or details on this subject?

Rafts of timber had been carried on the river before the canal was open to traffic. Not much ~~timber~~ seems to have been carried on the ~~canal~~, and rafts would certainly have been a nuisance to freight and packet boat traffic.

How to obtain a passage through locks at night: In approaching a lock by night, every owner, master or other person having charge of a boat shall, for ten minutes if necessary, give signal of his approach by blowing a horn or knocking at the Lock-keeper's door. If in that time, or after such knocking, the Lock-keeper shall not appear or answer, such owner, master, or other person may proceed to let himself



through the lock, taking care to close the head-gates and to open the lower gates of the lock after passing, and to leave the paddle gates of the culverts as he found them. No person, other than the Lock-keeper or one acting under his authority or with his consent, shall open or shut any guard or lock gate or handle or turn any paddle gate, but under the circumstances above stated. This regulation is effective at all times. The offender shall be held personally responsible for any damage in the Canal or its works resulting from the violation of this rule.

All sorts of horns and bugles were used. Some of them were homemade and others were "store-bought." As Clifford Swain said, "They had horns, but some of them had pretty big mouths." (Hahn, The C&O Canal Boatmen.) Some Lock-keepers were more dilligent than others. Joe Sandbower said, "An old fellow that tended that Seneca Lock, I don't care what hour of the night you'd went to his lock and hollered and there it was--the lantern--waving you ahead. I don't believe that old man ever slept." (ibid.) "Paddle-gates" are sometimes called "butterfly gates" or "wicket gates." The "culverts" cited here are probably the side culverts that went from the upstream gate recess inside the lock walls on each side of the lock to three openings on each side of the lock to help speed up the filling of the lock. These culverts were put into the first 27 locks and it was probably the intention of the company to have them in all the locks. They tended to fill up with debris and were a nuisance to maintain, however, and were later closed off. The head (upstream) gates are normally left closed so as to help prevent the loss of water through the lock. This is the practice even today in such countries as England and Wales where there is commonly a water shortage on many of the canals.

T.F. Hahn, Industrial Archelogist

NOTES FROM THE MINUTES OF THE ANNUAL GENERAL MEMBERSHIP MEETING OF FEBRUARY 26, 1983

Volunteering

The membership discussed volunteering to help the Park Service with various tasks including maintenance and improvement, archives cataloging and natural history inventories. The recently appointed Chairman of the Volunteers Committee led a wide-ranging discussion, at the end of which the membership passed a motion directing the Chairman to consult with the National Park Service and the Association's Board, and to schedule, publish and recommend to the membership volunteer projects.

The 30th Reunion Hike

Members discussed the plan for a whole-canal hike in April 1984. Interested prospective hikers who did not indicate their interest at the meeting should write to President Wood at the Association Address.

On Contracting Maintenance Work

Under orders of Management and Budget Circular A-76, the Park Service is required to hire contractors to do maintenance work if such an arrangement is cheaper than doing it itself. The C&O Canal NHP is currently keeping detailed records of maintenance costs in order to determine whether or not it will have to hire maintenance contractors.

Officers

The membership selected officers for the 1983-84 year and Board members for terms ending in 1984 and 1986. New officers are President, Bruce Wood and Treasurer, John Chandler. New to the Board is Al Stanley (replacing Bruce Wood). The other officers, and Board members whose terms expired in 1983, were re-elected. The names of Board members, their places of residence, and the expiration year of their terms are presented below:

Terms Expiring in 1984

Al Stanley, Montgomery County
Tom Hahn, Jefferson County
Paul Hauck, Montgomery County
Susan Henley, Prince William County
Barbara Yeaman, Montgomery County

Terms Expiring in 1985

Rockwood Foster, Washington City
Brad Haigh, Fairfax County
Mel Kaplan, Washington County
Joan Paull, Montgomery County
Ken Rollins, Caroline County

Terms Expiring in 1986

Victor Conrad, Washington County
Ralph Donnelly, Washington County
Carl Linden, Montgomery County
Nancy Long, Montgomery County
Bonnie Troxell, Allegany County

THE HANDICAPPED MOTORIZED VEHICLE PROGRAM

The NPS is in communication with organizations interested in conducting tests exploring the feasibility of allowing motorized handicapped vehicles on the towpath. No dates for tests have been set, probably owing to cold and stormy weather. The Park Service, however, "wants to try it out and probably [will] set some dates in the spring or summer. The Advisory Commission will be involved in [approving] a final program." The Park Service cannot speculate presently on the size, design or power of the proposed motorized vehicles.



NATIONAL PARK SERVICE CLARIFICATION ON BIOCIDES USE IN THE PARK

The last issue (January 1983) of Along the Towpath reported that the Park Service told the C&O Canal NHP Advisory Commission that the NPS was planning a herbicide spraying program using a sulfur-based herbicide, Ammate(Dupont). At that meeting, the Park Service did not address the issue of the risks of such a program to non-target organisms; it mentioned that the benefit of applying the herbicide was protection against destruction of masonry.

In an elaboration to Along the Towpath, Superintendent Stanton pointed out that, when he made his Sept. 18, 1982 statement to the Advisory Commission, he was referring to Ammate tests, not to a full-scale spraying program, and that he was unaware at the time that the test applications had already begun. The Superintendent also wrote:

Clearly, the problem of destructive freezing in the mortar joints of the 500 historic structures on the canal must be solved, somehow. It is one of our deepest ongoing concerns. Freezing is particularly critical in the aqueducts. When the canal was in operation the problem was not as great, since the canal was used during the growing season and much of the masonry was underwater. In addition, the Canal Company kept the masonry joints sealed, much better than we can do it.... We have been trying to solve the problem by manual extraction .../but/ hand extraction simply cannot keep up.

This Park uses no herbicides or pesticides and hasn't for four years.

The Superintendent has provided Along the Towpath with a list, from its "Pesticide Log," of dates, locations and other data pertaining to the Ammate test applications (See box). The most recent letter from Superintendent Stanton also appears in this newsletter.

A December 20, 1982 statement from Walter McMann, Resource Management Specialist in the Park, which arrived too late for inclusion in the January newsletter, appears elsewhere in this issue, and states that the Park decided in 1979 to "end the use of pesticides on park lands; the use of poisons ends at the park boundary." The Park Service further clarified this "Dec. 20th policy" in letters to Along the Towpath which indicated that the term "pesticides" in the policy statement also included herbicides.



AQUEDUCTS AND CULVERTS CURRENTLY UNDER REPAIR

The Park Service reports that the following projects were underway in January 1983:

Conococheague Aqueduct Stabilization: A ground crane with winch was ordered to re-lay stones. Stones were removed from the downstream wingwall and stored for reconstruction. Work was to continue until stopped by cold weather. In early spring stones were to have been removed from the creek bed and installed. Basewalls are being established. Reconstruction of walls will commence in late March.

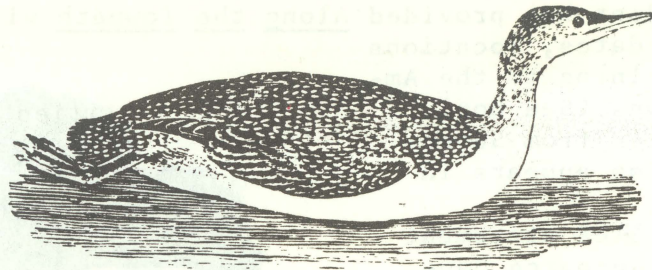
Culvert Stabilization, Allegany District: The wingwalls and headwalls of Culverts 185 and 233 were removed on the berm side and have been reconstructed. Structures have been repointed, and were 95% complete in January. Work was to have begun again on these culverts in the early spring.

Culvert Stabilization, Piedmont and Palisades Districts: The headwalls and wingwalls of culverts 121½ and 122 (river side and berm side) have been removed and reconstructed. The barrel of culvert 122 is to be excavated and reinforced, and a concrete shroud is to be installed. Culvert 127 is to be repaired during the spring.

Broad Run Trunk: Broad Run Trunk was a wooden flume which carried the canal across Broad Run. It was the only one of its kind on the canal, and is located at mile 31.9. It was originally constructed of stone and described as a culvert. Work began on it in 1831 and it was probably completed by the fall of 1832. It had two arches of 16-foot spans each of which made it unique as a culvert.

The culvert was washed out by a flood in 1846 and was replaced by a temporary wood trunk only as an expedient in order to restore navigation as quickly as possible. By 1846 the structure had deteriorated to a point where maintenance was no longer feasible. At this time it was decided to rebuild the structure with a permanent trunk to avoid routine repairs. No major work had to be done on this structure from 1857 to the last days of the canal.

In the summer of 1982 the NPS removed and stored the original wood from the bed of the trunk along with miscellaneous bits of hardware. Although the wood trunk will not be rebuilt, the Park Service will be able to interpret this site much better after the stone abutments are restored.



The Second Speckled Diver

ON THE LACK OF AUTHENTICITY OF THE GEORGETOWN BARGE

In the last issue of this newsletter, boat designer Carroll Gantz criticized the National Park Service for disregarding historical authenticity in the construction of the Georgetown barge, producing what he regarded as an "affront" to visitors. C&O Canal NHP Superintendent Dick Stanton defended the Park Service's new barge in a recent letter to Along the Towpath:

We did not attempt to build a barge that was totally authentic. There are good reasons. First, any passenger barge on the canal must be a compromise. Benches are installed for the comfort of the passengers. A covering is essential to keep the park visitors dry during rains. The covering is also installed to avoid injury to the visitor from flying rocks, a real problem which has to be dealt with. We have a rudder at the bow because we are unable to turn the barge around in the Key Bridge area. As for the finishing touches, the barge had to be fabricated quickly in order to have it available at the end of the 1982 season. This was a commitment we made to the donor and I am pleased that we met this commitment. Ten thousand dollars was withheld from the contract price to provide for better finishing touches which will be completed either by the contractor or the park maintenance folks before the 1983 season begins.

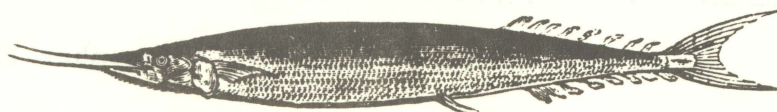
AMMATE TEST DATA

The following data were provided by the Park Service, C&O Canal NHP, concerning the Ammate (herbicide) tests:

<u>Site</u>	<u>Date of Application</u>
1. Alexandria Aqueduct (mile 1.1)	October 7, 1982
2. Stone wall (mile 13)	October 8, 1982
3. Locks 15/16 (mile 13)	October 8, 1982
4. Wall at Lock 17 (mile 13.9)	October 8, 1982
5. Lock 33 (mile 60.7)	Sept. 8, 1982
6. Lock 34 (mile 61.6)	Sept. 8, 1982
7. Lock 37 (mile 67)	Sept. 8, 1982
8. Wall at Lock 38 (mile 72.8)	Sept. 7, 1982
9. Lock 39 (mile 74.0)	Sept. 7, 1982
10. Lock 40 (mile 78.4)	Sept. 7, 1982
11. Culvert (mile 81.1)	Sept. 7, 1982
12. Site at Dam 5 (mile 106.8)	Sept. 3, 1982
13. Wingwall at Four Locks (mile 109.5)	Sept. 3, 1982
14. Site at Ft. Frederick (mile 112.4)	Sept. 3, 1982
15. Cement mill (mile 127.6)	Sept. 2, 1982
16. Below Paw Paw tunnel	
Lock 63 1/3 (mile 154.5)	Sept. 1, 1982
Lock 64 2/3 (mile 154.6)	Sept. 1, 1982
Lock 66 (mile 154.7)	Sept. 1, 1982
Tunnel vicinity (mile 155.8)	Sept. 1, 1982

Work was done by trained Maryland certified pesticide applicators. Photographs were taken before and after treatment. Treated areas monitored for adverse effect on adjacent aquatic and terrestrial areas. This herbicide was applied only as a spot-treatment to areas where mechanical methods such as cutting, flaming and weeding are ineffective, and where protected resources might be damaged in the absence of control.

Product used: Ammate X-NI Weed and Brush Killer - Dupont
EPA Registration Number 352-311-AA. Active ingredient is ammonium sulfamate. Class of chemical is sulfur.



PARK LANDS AND PESTICIDES

(From Walter McMann, NPS)

In 1979, Park management at the C&O Canal NHP made the decision to end the use of pesticides on park lands. It was decided that the use of chemical poisons was most inappropriate on National Park Service lands. The transition was not easy, but, for the most part, the use of pesticides at the canal has ended. The most dramatic change has been in the area of mosquito control.

Before 1979, fogging with insecticides along the towpath had been routinely allowed. A park neighbor merely had to call the University of Maryland mosquito abatement team, and they would adulticide(sic) along the towpath with Malathion. Clearly, an alternative was needed.

Calling upon the services of the John Muir Institute, a private, non-profit research group, the park developed and initiated an integrated pest management

(IPM) program for mosquitoes in the area where complaints had historically arisen. The program, now in its fourth year, is based on identifying breeding sources on a weekly basis throughout the season. By focusing surveillance on the larvae stages and their breeding sources, mosquitoes can be detected and eliminated before they emerge as adults.

As the surveys progressed, potential breeding sites were located and mapped, and appropriate control measures were taken. One obvious method was simply to drain the stagnant pools. Another method, and the one now predominantly in use, is the use of the bacterium Bacillus thuringiensis var israelensis (BTI). BTI is extremely virulent in killing mosquito larvae, but is harmless to people and wildlife, killing only the mosquito larvae and the larvae of a few closely related species of flies, some of which are also pests (black flies). Natural enemies, such as back swimmers and fish, are unaffected.

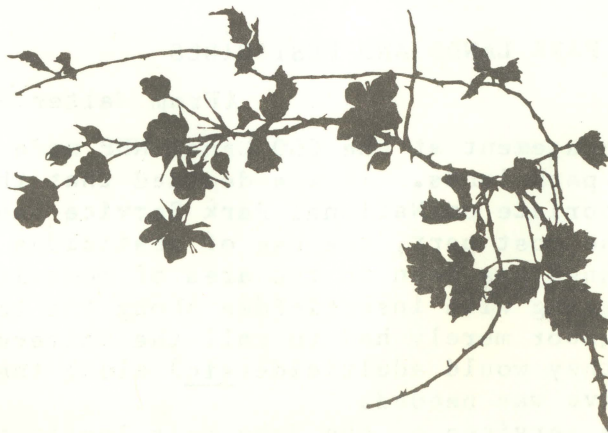
We know, to some, the use of any control seems inappropriate in a natural setting. We can only respond by reminding those individuals that the breeding sites are for the most part man-made. Moreover, pressure continues to bear upon park management to reintroduce the spray program. County officials, private individuals, federal and state representatives, representing their constituents, are constantly questioning the Park about what we are doing about mosquitoes. It is only by offering a viable alternative to fogging that we can preclude its use.

The program will continue and next year we plan a strong public education program aimed at showing our neighbors that there are alternatives to chemical poisons. Fogging is indiscriminate and the Maryland abatement teams spray in areas adjacent to the canal. If we are to adequately protect the public and park wildlife, the alternative solution to management of this pest must be shared with our neighbors. In many cases the solution might be simply emptying old tires full of water in which the mosquito larvae thrive. In others it might be a matter of convincing someone that a few mosquitoes are better than having themselves subjected to a chemical that some studies list as potentially harmful(1).

There is a recent book in the park library called America the Poisoned. Its author is Lewis Regenstein. The contents of this book will shock those not familiar with what chemicals are doing to our environment. It will also support the stand taken by the canal; viz., that the use of poisons end at the park boundary.

1. Duffy, Frank H & James Burchfield, "Persistent Effects of Organophosphate Exposure as Evidenced by Electroencephalographic Measurements," Pesticide Induced Delayed Neurotoxicity, US Environmental Protection Agency, 1976, pp. 102-142.
- Tamura, Osamu & Yukihiro Mitsui, "Organophosphorus Pesticides as a Cause of Myopia in School Children: An Epidemiological Study," Japanese Journal of Ophthalmology, 19, 1975, pp. 250-253.

December 20, 1982



CORRESPONDENCE

I. Adverse Contaminants and the Enormous Potential of Voluntarism

(from Richard Stanton)

When we dreamed up the Ammate program last year we thought a lot about it. We are certainly not sold on Ammate as a solution to the vegetation program but our minds are open. The future of Ammate as a possible solution depends on the study sites, this Spring; the comparison of what has happened at each site with what the state of each site was last year, via photographs. For example, if the vegetation blossoms forth at the test sites, obviously Ammate is valueless as a long term solution and would be eliminated. If the sites do not revegetate we may be on to something worth considering. In any event, the results of our tests will be discussed in the public forum, probably in the June or September Commission meetings regardless of their success or failure. If the public has a strong feeling against Ammate, regardless of result, we would not use it. Its use on a wide scale would, of course, require the acceptance by the public.

Another phenomenon which has occurred might change our entire thinking about removal of vegetation, Volunteers. We have received a gratifying response from the Association members and have individual volunteers about to go into the vegetation removal business with the first big project proposed by the Assn. (according to Phil Valentini, today) at the Alexandria Aqueduct. A massive and continuing program of volunteer vegetation extraction might put the matter of Ammate and other options to rest. Time will tell.

As for the maintenance force on vegetation removal..in no way can the maintenance groups handle such an awesome program and get its daily work done to serve the park visitor. Alternatives are mandatory. Also, contractors are out..the cost to contract vegetative extration are so prohibitive as to be unthinkable.

The raising of the Ammate issue in the Newsletter simply underscored our failure to communicate our test plan beyond simply announcing it at a first meeting of the new Commission..September, 1982. In hindsight, we could have done a better job of communicating this program to the public.

The park has a continuing concern about the quality of the park especially since we are at the river's edge. Chris Baumann and Mac work assiduously on one problem the Canal has had since its inception...the delivery of adverse contaminants into and across the canal. Of late, Phil. V. tells me that we now have Assn. volunteers to assist in some of Chris' work which is to identify and measure adverse impacts coming into the park, including silt. When this has been measured and identified we will be able to do something about it. The whole matter is a long tough struggle which must be done, somehow, with all the other things we are expected to do. We are making progress, however.

The Association's positive attitude toward voluntarism on their beloved Canal is a bright spot, one of the brightest in a long time. There is no end to what this effort might do. The time is right and the possibilities endless, from picks and shovels to curatorial assistance.

Sharpsburg, Md., March 14, 1983

(The writer is the Superintendent of the C&O Canal National Park)

II. Can Voluntarism Transcend Well-Meaning Talk and Puffery?

(From John Chandler)

One theme stands out above all else in the aftermath of the Association's February membership meeting--voluntarism. It came up repeatedly in the presentations by officers of the NPS and was pursued further during the business meeting. NPS has a long list of projects, great and small, that would be suitable for volunteer efforts toward improving the C & O Canal Park and enriching the Park program. NPS also has a wish list of hundreds of items and projects for which donations would be accepted, ranging from a \$7 million reconstruction of the Monocacy Aqueduct down to small tools and equipment for daily Park operations. Members were invited to sign up for a Canal wildlife habitat survey and inventory that could take several years to complete, and several accepted the invitation. During the business meeting many ideas were suggested (volunteered), some of them familiar, some of them novel. We wound up with a fine resolution, unanimously endorsing development of a volunteer program in cooperation with the Park Service.

But what, on balance, has been decided? The resolution was positive but general in nature. Have the Association and its members made a serious commitment of time and effort in support of the Canal, or have we only indulged in some well-meaning talk and puffery that will soon be forgotten? It is too early to tell.

On one hand, there seems to be a genuine desire on the part of many members who were willing to sign up as potential volunteers. On the other hand, we do not have a set of specifics. Who will do what, where, and when, and who will guide the efforts? In short, we aren't organized yet.

A measure of the difficulty is seen in the panoply of ideas that have emerged, ranging from maintenance tasks such as litter pick-up and weed control, through historical research, straightening out archives, installation of signs, interpretive walks and lectures, and wildlife surveys. Are our interests so diffuse that they will be hard to bring into focus? Then there is the all-important matter of careful coordination, particularly with the Park Service but also with the C & O Canal Commission and possibly other bodies. Questions will be raised about resources, supplies, training, and leadership on approved volunteer projects.

None of these matters are insoluble, but they will require effort and time and goodwill all around. The Association has a new challenge, namely, to set up a meaningful volunteer program and make it work. There could be exciting times ahead for members and friends of the Canal.

Bethesda, Md., March 23, 1983

(The writer is Treasurer and a former President of the Association)

Directions to Paw Paw

From the Southeast: Follow either route 7 or route 50 to Winchester. Turn right (north) onto route 522 and go past Cross Junction, Va., to the intersection of route 127. Turn left onto route 127 and follow it for ten miles to Forks of Cacapon, West. Va. Turn right onto route 29 north which runs into route 9. Follow route 9 west which becomes route 51 when it crosses the Potomac at Paw Paw, West Va. Just after crossing the River look for the Paw Paw brickyard(campground) sign on the right. Turn right into a dirt road leading into the campground.

From the East and West: Follow I-70 to Hancock. Exit onto route 522 (south) to Berkeley Springs, West. Va. Turn right onto westbound route 9, and continue as above.

AN NPS REPORT ON VEGETATIVE THREATS

The National Capital Region of the NPS contracted with Soil Systems, Inc. and EDAP, Inc. to study vegetative threats to historic sites and structures in the National Capital Region area, and to recommend solutions at specific sites which are threatened by inappropriate vegetation. These sites included Four Locks, Widewater, Fifteen Mile Creek and Carderock along the C & O Canal. The contractors produced their final report in January 1983, and the following are excerpts from the report:

The Physical Problem

Vegetation is seldom the intrinsic cause of a loss of structural or interpretive value; rather it is unmanaged vegetation that is the cause of this damage. Neglect of an historic building or structure [as at Fifteen Mile Creek] can result in the appearance and development of vegetation which further damages the resource. Physical defects in structures [of the studied sites] frequently made way for volunteer vegetation further aggravating the problem. A program of responsible structural maintenance would serve to eliminate the invitation to invasive vegetation Vegetation is symptomatic of a more serious structural problem and any program of vegetation management must be accompanied by an improvement of structural conditions.

An absence of human management [of vegetation] at a site [as at the Canal sites studied] can result in plants quickly resuming a pattern of natural growth contrary to the goals of a site. [Such] problems could be solved through an adjusted program of scheduled maintenance.

The Management Problem

Park Service staff are faced with . . . a lack of clear policy [in] managing both natural and man-made elements of a landscape. Management of the natural and the cultural landscape has traditionally been the preserve of . . . two separate disciplines [which] sometimes develop conflicting goals and policies. The [NPS] Management Policies Handbook of 1978 does not recognize that native plants can pose a threat to historic sites; this point is only noted in a policy clarification statement in 1981. The overlap of natural elements and cultural landscapes is seldom addressed.

Chemical control of vegetative threats is possible under existing [Park Service] guidelines. Even the most prudent use of herbicides, [however] is allowed only where it may be demonstrated that "(a) there is a clear and present danger to the health and safety of man; and/or (b) that there is danger of damage [to], or destruction of, property or resources and the control methods of no action, mechanical, cultural and/or biological control are non-existent, unavailable or unacceptable." Furthermore, herbicide use "is not to be based upon considerations of available funds or staff costs."

At [most] sites, the need is for more intensive maintenance, [perhaps] additional and extensive maintenance. Bringing many of the sites to the point at which preventive maintenance [could be implemented] would require [nonexistent additional] staff resources. [The alternative, however,] is to [periodically] overwhelm the current growth with manpower, machinery and chemicals. This approach [sometimes] called "fire fighting," will always be more costly because^{of} the incalculable value of the resource which has been damaged.



(Continued on p. 22)

PROSPECTIVE VOLUNTEERS TAKE NOTE

A Primer on the Ways in Which Intrusive Vegetation Potentiates Damage (according to SSI/EDAW) and the Do's and Don't's of Removal.



Herbacious Plants (wild flowers, grasses, weeds) can pose a threat by developing in mortar joints or defects in masonry and by trapping moisture in these openings causing them to enlarge. Another threat lies in their ability to open way for other plant types potentially more harmful.

For the most part, herbacious plants are best removed by hand pulling or weeding. The application of approved herbicides is . . . less preferable due to its potential for long-term damage. Hand pulling also insures a closer level of inspection of the historic resource which can point to structural maintenance needs at an early stage in their development.

Vines may insert tendrils or aerial roots in the mortar or brick, weakening the mortar and masonry by increased exposure to freeze-thaw actions, or by enlarging the openings and dislodging stone or brick from a moisture-damaged wall. An enzyme from the roots which attacks the stability of lime may cause disintegration of the mortar until only the sand remains. A dense growth of vines or weeds prevents the sun from drying the wall; as moisture builds up, dry rot can occur in wood, and decay in mortar and masonry.

Vines may be controlled by girdling or by cutting at the base, then left to dry and carefully removed. Great care must be taken in removing vines so as not to disturb (weakened) mortar and masonry.

Lichens, mosses and fungi indicate a moisture problem inherent in a structure and may make way for more damaging plants by causing the accumulation of humus, or by chemical reaction with masonry, resulting in deterioration.

A variety of solutions, including diluted ammonia, toxic washes and herbicides can be applied to control growth. Toxic substances, (however, bring about) corrosion and discoloration of building materials (among their non-biological hazards). (Allowance for good air circulation should prevent reappearance after removal.)

Shrubs which become established in cracks, crevices, mortar joints and other undesirable places can develop particularly strong and damaging root systems. (When a shrub grows on a masonry wall,) the potential for structural damage is (great). The shrub may need to be lifted out by its roots and the structure repaired. When structural repair is not needed, the plant may be cut off at its base.

Trees pose a threat by their invasive roots, by dropping leaves, (and) by withdrawal of ground moisture. When trees are removed, physical repairs to the structure may be required. In certain cases, mature trees are best left in place while they serve as support to the historic structure. Ultimately, their removal is necessary for the survival of the historic resource, but not until extensive repairs may be planned in conjunction with the tree removal.

EDITORIALS

(From Bob Greenspun)

Lack of Communication is Our First Problem

The tangle of policy statements, letters, interpretations, clarifications and assumptions involved in the issue of biocide use in the Park can, perhaps, be reduced to three issues: using pesticides to kill mosquitoes and reduce crop decimation, using herbicides to kill intrusive vegetation which threatens to accelerate the destruction of historic structures needing repairs, and communicating Park Service policies and programs concerning biocides to the interested public.

With regard to pesticides, the Dec. 20th policy makes it clear that the Park regards as politically impossible answering "nothing" to the "constant questions over what we are doing about mosquitoes." To the Park Service's credit, the Resource Management staff has developed alternatives to pesticide application for mosquito control which it hopes will continue to preclude pesticide use, and will attempt to teach the public about the "alternatives to chemical poisons." As for agricultural uses of pesticides, the Park Service's agricultural agreement made with persons farming park land prohibits "the use of any herbicide or pesticide." Pesticides are still applied by occupants with long-term retention rights, however, at two orchards and one farm within the park boundaries (near mileposts 131, 125 and 116), because the Park Service "lacks the authority to restrict their agricultural practices." The NPS, apparently, could restrict the use of pesticides on "six rows" in one of the orchards, but, evidently, has not done so.

The herbicide issue is more complex, however, as it bears upon the question of the Park Service's responsibility to maintain the historic structures. The fortuitous appearance of a Park Service-sponsored report (the SSI/EDAW report) on the subject of destructive vegetative intrusions in parks in the Washington area, provides an expert but disinterested view of the physical and management difficulties involved. (Excerpts from the report are printed elsewhere in this newsletter.) The central issues suggested by the report involve disparate management policies for natural and cultural landscapes and lack of money. If the historic structures were restored to, and maintained in, excellent condition, it is less likely the sort of vegetation management then required would involve consideration of herbicides. Lack of sufficient money promises, however, to remain a chronic problem; some canal structures probably will continue to be maintained in good condition, and others, of necessity, will be allowed to deteriorate until, if we are fortunate, they are "stabilized" in an eleventh-hour attempt to prevent their loss. The SSI report states that such last-ditch efforts are "always more costly" than expensive restoration, but the "incalculable" value of the damage done to historic structures left to decay does not predictably affect the Park Service's budget. Without sufficient labor to maintain structures, we, the public, may be faced with choosing between losing an historical structure and chemical or other environmental insults; that is, between abandoning the cultural and contaminating the natural. A new wave of volunteers may postpone the necessity of making such a choice, but surely we can ask if we must be faced with such grisly alternatives?

The communications problem is recognized by Superintendent Stanton in a thoughtful letter published in this issue of Along the Towpath. The Park Service, he says, "could have done a better job of communicating" with the public, and, let us presume, will do a better job in the future. For there are, even now, aspects of the biocide issue which remain inexplicable. If, as the NPS says, it hasn't used herbicides for four years, what are we to make of the Ammate tests last summer? If the Park Service made the decision in 1979 to end the use of herbicides, why does the Superintendent's letter in this issue remind us that "if the /Ammate/ test sites do not revegetate we may be onto something worth considering?" If pesticides are to stop at the park boundary, why doesn't the Park Service prohibit pesticide use on the six rows of the orchard where it can?

These questions, of course, suggest lack of communication in the presence of an abundance, indeed, a superfluity, of words. The fundamental matter here

precedes consideration of whether the Park Service should have a biocide policy, or what the policy should be, or whether biocides have a place in the Park; it is one of merely understanding what the National Park Service is saying. If the NPS would like us to believe that a herbicide test is not a herbicide use, or that deciding to end herbicide use allows for the consideration of future herbicide use, then the logic of such subtleties should be explained in detail.

Each of us has his own opinion on the issues. Each of us varies in the intensity with which we regard cultural or environmental injury; some of us are more fearful of the one than of the other; some of us regard injury as something to be proved, and others hold that the lack of injury is what must be demonstrated. Some of us will not see our preferred policies carried out, but none of us can benefit from inaccurately or incompletely communicating, or not communicating at all.

PURPLE MARTIN



Towpath Motorized Vehicles and Precedents

In this issue of Along the Towpath we are told that the Park Service wants to try out motorized vehicles for handicapped visitors on the towpath, but cannot yet tell us whether these proposed vehicles will be innocuous, as handpowered wheelchairs are, or will force able-bodied towpath users to fear for their safety, and to lament that they were suddenly denied the repose for which they come to the towpath.

In this issue we are also told of several instances of fears that actions seen as, or taken for, precedents, would result in future untoward outcomes. The Advisory Commission feared that lax enforcement of the Riverbend permit would set a precedent of difficulty in protecting the canal "environment" from future "adverse effects." The Superintendent warned that allowing a landowner with retention rights to add a structure on Park property could set an undesirable precedent, and the Commission wrote into its approval of such an addition that it did not want to set a precedent. Finally, the Planning and Projects Committee of the Advisory Commission was fearful of setting a precedent in bypassing regular Commission procedures, and added two paragraphs of monographic prose to its report explaining how it could circumvent Commission procedure and yet not set a precedent.

It would seem that the Advisory Commission fears precedents in these cases because precedents can legitimize actions that would be prohibited, if evaluated on their merits alone. The problem with precedents is that they are subject to interpretations; a person claiming his proposed action should be allowed will seek out, and point to, earlier occasions when related allowances were justified; the most ardent disclaimers of well-meaning persons may not protect them against an adjudicatory judgment that they have, indeed, set a precedent.

As the Park Service proceeds to "test" motorized handicapped vehicles on the towpath, it has in mind its commitment to assist the handicapped. Few of us would cavil with that goal. Perhaps the Park Service, in its enthusiasm, needs to be reminded of the nightmare that could result from setting a precedent for catering to all who claim to be entitled to motorized towpath transportation. The Park Service seems confident this project will not get out of hand. This is another issue that merits careful watching.

(The writer is the Editor of Along the Towpath)

THE PRESIDENT'S COLUMN

(From Bruce Wood)

Thank you for electing me President of the Chesapeake and Ohio Canal Association! The records laid down by my predecessors are challenges which I hope to follow well. Since most of my predecessors continue to be active within the Association, and several of them are on the Board of Directors, you may be assured that I will be able to obtain the guidance I may need and that we are in good hands.

John Chandler did a great job as President, especially in improving communication with the National Park Service, by establishing the Heritage Walk and the separate business meeting, and with his columns in this newsletter. Many thanks are due to him for his service.

I hope to enlarge our active membership, promote volunteer activities, maintain at least three general membership gatherings per year, and continue frequent communication with the National Park Service and with the C & O Canal National Historical Park Advisory Commission.

As our activities progress, I will be reporting on them in this newsletter and at our meetings -- keep reading, attending, and participating! Your support and comments are needed, so please feel free to let me know how you think I am doing.

LEVEL WALKER NOTES AND REPORTS

The level walker turnout at the annual meeting was excellent. We discovered that Shepherdstown is a fascinating historical town. We must return for a more complete walking tour.

Some of the recent new walkers are Rita Hirrlinger, Dave Johnson, Robert Steed and Jim Thomas.

Not many level walker reports were submitted this winter, so only a few are published at this time.

Mark your calendar for the next level walker meeting, which will be at Glen Echo Town Hall on MacArthur Boulevard and Harvard Avenue on May 21, 1983. The tentative schedule:

- 10 AM - Meeting
- 11 AM - Walking tour of the Park Service facility at Glen Echo and the Clara Barton House.
- 12 NOON - Brown-bag lunch.
- 1 PM - A walk on the towpath.

All C&O Canal Association members are welcome. We will have interesting and important items to discuss.

The updated level walker roster and a list of names and phone numbers of Park managers and rangers will appear in the next issue of the newsletter.

Lyman

Sec. 8 - Swains Lock to Pennyfield Lock - Al Stanley - March 1983

The towpath was a bit muddy.. Several dead trees were on the berm downstream from WSSC. The only flower seen was a yellow aster.

Milepost 19 was in good condition, although it could use some paint. The Pennyfield Lock was clean but a bit weedy. The lockhouse was in good condition. A depression in the towpath at about 18.2 seemed to be about one foot deep and 2½ feet wide with many cracks on the canal and downcanal sides. The trash level was low. Milepost 18 was in good condition, although it needed paint. Milepost 17 is leaning toward the levee. Swains HBO is clean but low on firewood.

The following usage was noted: 46 hikers, 21 cyclists, four fishermen, eight joggers, six campers, three canoeists and four backpackers. Twenty-four cars were parked at Pennyfield Lock, 21 at Swains Lock and, two hours later, 18 at Pennyfield Lock.

Horses' hooves have made deep depressions on the towpath, leaving a rather bumpy situation on the dried-out surface.

Sec. 32 - Marsh Run to Dam 4 - Edith and Marvin Wilkerson - October 1982

The towpath was in good condition. The Big Woods HBO was fully operational with the latrine in neat condition. There was little human traffic along the towpath.

Few birds, except crows, were observed. Two large turtles were seen in the river. A large buck deer crossed the towpath toward the river.

Sec. 37 - Falling Waters to Williamsport - Ellen Holway and Elizabeth Scott - Feb 1983

The towpath was quiet. Few birds and no wild animals were observed. The river was quite high and silty.

The town of Williamsport will replace a sewer line that crosses the towpath at Lockhouse 44, involving a 180-foot stretch of the towpath. Some crushed-stone fill has been placed on the towpath just below the grade up to the lockhouse.

A door lock at the lockhouse has been broken off.

Sec. 41 - Dam 5 to Lock 47 - Edward Fenimore - November 1982

The towpath was in excellent condition. An overgrown road leading from Lock 46 to the Leatherman place has been reopened about half-way.

Beaver work was noted about 500 yards above Dam 5. Jays were audible, and some chickadees were seen in the trees along the old widewater at Charles Mill. A large hawk was seen at the ruined mill. No other walkers or riders were encountered, and there was no activity on the river.

Sec. 44 - Fort Frederick to Ernstville - Jane and Harold Larsen - February 1983

The towpath was covered with snow, and Big Pool was frozen over. There was very little trash to pick up. We saw no broken branches or other obstructions.

Deer, raccoon and rabbit tracks crisscrossed the towpath. We heard woodpeckers and crows and saw a few flitting insects, like small fruit flies.

A wall remnant at the waste weir at M.113 is collapsing and need stabilization. Four joggers (in snow?!) were the only people we encountered.

THE NPS REPORT ON VEGETATIVE INTRUSIONS (Continued from page 17):

These excerpts are necessarily brief glimpses of the 100-page report delivered to the Park Service. The four canal sites are examined in detail as are other area structures with varying degrees of vegetative *disruption*, and two companion studies are advanced. Interested members should request the final report from the NPS, National Capital Region, Washington, D.C.

CALENDAR OF COMING EVENTS

(Dates of Association-sponsored events are enclosed in boxes.)

- April 23, 1983 - The 1983 Justice Douglas (29th Reunion) hike at Paw Paw (mile 156) begins at 10:00 AM. Bring lunches, canteens and friends. Camping, a social hour and a dinner are available. Details inside.
- April 24, 1983 - Arrive at 9:00 AM in Cumberland (mile 184.5) for the start of the Western Allegany March of Dimes walk. This hike will begin at the Cumberland mall, proceed along the ~~top~~ path to North Branch (mile 175) and return to Cumberland, for a total distance of 19 miles. A patch showing the Western Maryland Railroad station and Lock 75 is available for those persons wishing to participate in the fund-raising program. For further information, call 301-729-2515 or 301-729-6476.
- May 1, 1983 - The Association-sponsored volunteer program to remove damaging intrusive vegetation from the old Alexandria aqueduct (mile 1.1) begins at 9:00 AM. Meet under Key Bridge. All members welcome. Details in this issue of the newsletter.
- May 6-8, 1983 - Pa. Canal Society tour of Pa. Main Line Canal. Write Bill Shank, 809 Rathton Rd., York, PA 17403.
- May 14, 1983 - "Old-time" fiddlers' contest and bluegrass festival at Lock 75 (mile 175). For further information, call John Millar, 304-726-4500 or 301-729-3136.
- May 21, 1983 - Level walkers meeting and hike, Glen Echo Town Hall (near mile 7.5). Meeting 10 AM; Park Service tour and walk later. All members welcome. Details inside.
- May 22, 1983 - Association Board meeting, 4:00 PM, Secretary Kay Seward's home, 5103 Acacia Ave., Bethesda, MD 20814. A pot luck dinner will follow the meeting. As usual, Board meetings are open to all members. For further information, write President Wood at the Association address.
- June 4, 1983 - Roebling aqueduct symposium and field trip; NPS dedication program involved. Write Center for Canal History, 200 S Delaware Dr., P.O. Box 877, Easton, PA 18042.
- June 18, 1983 - C&O Canal NHP Advisory Commission meeting in Cumberland. The public is welcome. For details of time and location, write the National Park Service, P.O. Box 4, Sharpsburg, MD 21782.
- June 27-30, 1983 - Trip along the path of the Erie canal. (Est. cost \$250) Write Paul Ross, 18 Circle Ave., Ellenville, NY 12428.

RESERVATION FORM FOR DINNER AFTER THE
1983 JUSTICE DOUGLAS HIKE

APRIL 23, 1983

Please reserve _____ dinners @ \$7 per dinner. Total enclosed.....

Checks should be made payable to the C&O Canal Association and sent to P.O. Box 66, Glen Echo, MD 20812-0066, by April 11, 1983.

No tickets will be sent; your name will be checked at the door.

Fill in the remainder of this form if a satisfactory name and address is not already affixed to the back of this form.

Name: _____

Address: _____

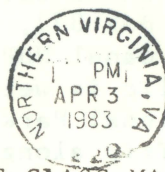
FROM THE EDITOR

Phew! This issue of Along the Towpath is the largest one I have presided over for the Association. Most of it contains information supplied by the Park Service appropriately (hopefully) summarized and interpreted. I would like to take this occasion to thank Dick Stanton and Walter McMann of the NPS for their personal contributions (although we don't always communicate well or agree) as well as for the endless supply of minutes, reports and notes that issue forth from Washington and Ferry Hill. Thanks also to Phil Valentini, Al Stanley, John Chandler and Bruce Wood for their contributions; competition of ideas is what makes the newsletter worth reading. Thanks to Lyman Stucker for his always popular level walker information which always arrives ^{well} ahead of my deadline. Once again Tom Hahn has supplied us with an excellent perspective on Canal Co. history, and I want to thank him once again. Finally, thanks to Michele Carsrud for much-needed assistance with the typing of this voluminous document.

On the subject of the size of the newsletter, editing it (an Association euphemism for information-gathering, writing, summarizing, typing, pasting up, illustrating, delivering to and retrieving from the printer, stamping, addressing and mailing) has become an enormous job. For some time, the twelve-page issues seemed to be sufficient, but the last two issues have been much larger, and are difficult for a volunteer editor with a life outside the newsroom to handle alone. Perhaps future issues will contain fewer pages, but I would appreciate help from members who would like to perform any of the various tasks involved, editorial and mechanical. If you are interested, please write to me and let me know what you would like to do. In addition to needing help, I have been editor of Along the Towpath for over four years, and sooner or later will want to pass on the editorial pen; perhaps one of you who can help out as second fiddle now will want to orchestrate later.

BG

C&O Canal Association
P.O. Box 66
Glen Echo, MD 20812-0066



FIRST CLASS MAIL



INSIDE

- o First Volunteer Program
- o 1983 Justice Douglas Hike Details
- o Rabies Prevention Notes
- o Advisory Commission Meeting Notes
- o Endangered Bat in the Park
- o Canal Co. Regulations Interpreted
- o Membership Meeting Notes
- o More on Biocide Use in the Park
- o Aqueduct Stabilization Report
- o Correspondence
- o Editorials
- o Excerpts from Report on Vegetative Intrusions
- o The President's Column
- o Level Walker Notes and Reports
- o A Primer on Vegetation Removal for Volunteers
- o More

John C. Frye

Gapland MD
21736