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IN TOUCH

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ENERGY INTERPRETATION

In 1979 six areas were designated as energy incentive parks. Special emphasis and funds were made available to these areas for surveys, retrofitting and special interpretive programs and energy exhibits.

Each of the parks were asked to summarize their interpretive experiences for this special issue of In Touch.

Energy - Its increasing cost and decreasing availability will be with us for a long time. The more we can help the public understand the realities of this subject the faster this nation will "get its act together."

Keep a few things in mind when considering your parks' role in this program.

- Integrate the subject into your programs. Don't just insert a "commercial" in the program.
- Keep whatever you do relevant to the themes, resources and operating programs of your area.
- Finally, be accurate. Don't let emotions and personal feelings dictate your message.

Dave Dame

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COLONIAL NATIONAL HISTORICAL PARK

OLD HAT: HISTORICAL/ENERGY INTERPRETATION

The news that we were to be one of the vanguard in energy conservation interpretation coming just before seasonal training caused some momentary dismay at best. However, upon calmer reflection, remembering that I have, above all, the privilege of working with a group of the finest people and interpreters that I have known, I then set out to enlist the talent to tackle this problem.

In reality, it proved to be less difficult than first assumed, basically, because the entire history of man revolves around his search for and utilization of energy. While the scale may differ greatly, the theme is the same. The colonist's search for food, warmth and shelter at Jamestown echoed this, as did their often wasteful gathering of raw materials to feed England's growing Industrial Revolution. The park's story is climaxed by man's most wasteful use of energy in the most violent of ways, war.

The close examination of our existing summer and winter programs revealed that what we were already doing required only very minor changes. However, there were those who went even further. Two interpreters who have explored somewhat different avenues were Sue Holler and Ron Beaman.

Sue Holler's usual way of introducing herself and establishing lines of communication with her audience was to discuss where they came from. This summer, she led a discussion of goals and objectives. As last summer marked the 10th anniversary of the first moon landing, the group defended their reasons for wanting to continue space exploration or to remain on earth. She surveyed the group

to measure their spirit of adventure through a series of questions:

Who would go to the moon? Why? Adventure or fame? Plans exist to beam the sun's energy to earth by microwaves. Would we then want our country interested in space? Would the oil companies want a piece of the action? Wall Street stockbrokers might offer stock so that everyone could profit. In the 17th century, the Virginia Company of London sold stock to raise money to outfit ships to sail for the New World. The colonists came to find gold rather than oil and chose Jamestown as the best geographical location for shipping that gold to England.

Thus, visitors relate to the 17th century experience through their 20th century experiences and attitudes.

Ron Beaman's energy message combined the history of the Moore House and its inhabitants with an explanation of the relationship of man to his environment in 18th century Tidewater Virginia. In addition to the importance of the Moore House in the Siege of Yorktown, he described how people were making the most of their environment in the construction and furnishing of the house. While our interpretation is primarily focused on the historical significance of the house and its few original furnishings, we have learned that to ignore the interpretation of architecture and decorative arts entirely, will leave a portion of the audience wholly unsatisfied.

Therefore, for example, Ron discussed the construction of the central hallway which connected the front and back doors. This feature permitted the air to flow freely throughout the downstairs, thereby, creating a cooler and more comfortable atmosphere in which to live. The primary message was that these Americans discovered at an early time how they could adapt to the environment to make life more to their liking.

Perhaps the "grabbiest" line from this summer's interpretive effort came from Dwight Madison who concluded his Jamestown tour with the following bleak but realistic warning: if his audience did not learn energy conservation from the lessons of the past, at some future date some guide might be showing the remains of their community as a civilization that had vanished.

EXHIBITS

At the beginning of the summer, we received a memorandum from the Mid-Atlantic Regional Office stating the following goals conceived at an energy education workshop held in Alexandria:

- I. To transmit, whenever appropriate within the framework of your existing interpretive program energy concepts information. Conceptually, you will work with systems, ideas, and energy laws as they are evidenced in park systems. Informationally, whenever appropriate, communicate the park's energy program ... retrofitting projects, etc., to the public. Inform people about the rationale of the program and its achievement to date.

- II. To be a model of energy conservation. This means to conserve energy within the framework of your own program.

By August 10, sitting in the Jamestown Visitor Center was one of Colonial's tangible answers to that memorandum: an energy display. The disastrous effect of the unfortunate gas situation on visitation enabled us to free five interpreters from the daily schedule of walks and talks to design and develop the exhibit. Thanks to the strong spirit of cooperation in the division, the other interpreters took up the slack and offered activities to substitute for the gaps created by the absence of the five.

Through the combined efforts of Dwight Madison, Kris Paavola, Ann Meyers, Betty Browning and Anna Mary Warden, the project was completed in two weeks time at the approximate cost of \$200.00 for materials. Added cost was averted by utilizing exhibit material previously used in the museum and drawing from materials from the divisions of maintenance and protection.

The display is a colorful, easy to read, three sided exhibit strategically located in the front lobby of the Jamestown Visitor Center near the entrance. It allows the visitor to draw his own conclusions about energy, to gather free handouts for reading at home and to comment on the display or on energy. The exhibit was placed on three burlap covered panels, joined to form a three pointed star. Each of the six panels had a topic, title and short script independent of the others but collectively reflecting the theme of the importance of energy conservation.

Near the last panel was placed a large red gasoline can with a pen and pad attached. The top of the can had a

slit into which visitor comments could be placed. The comments fell into three categories:

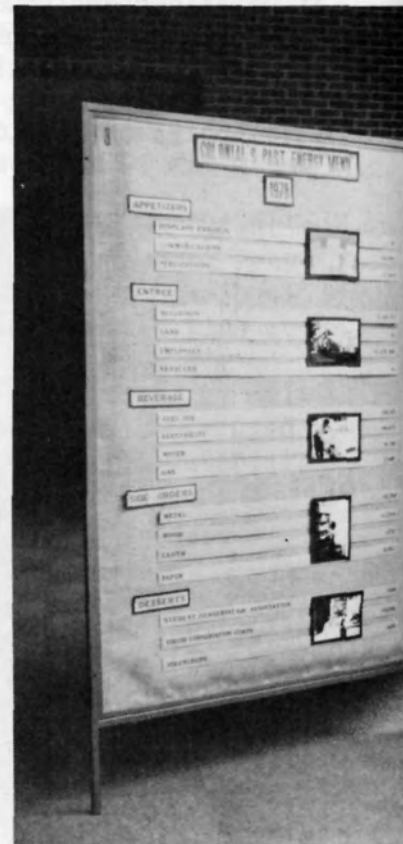
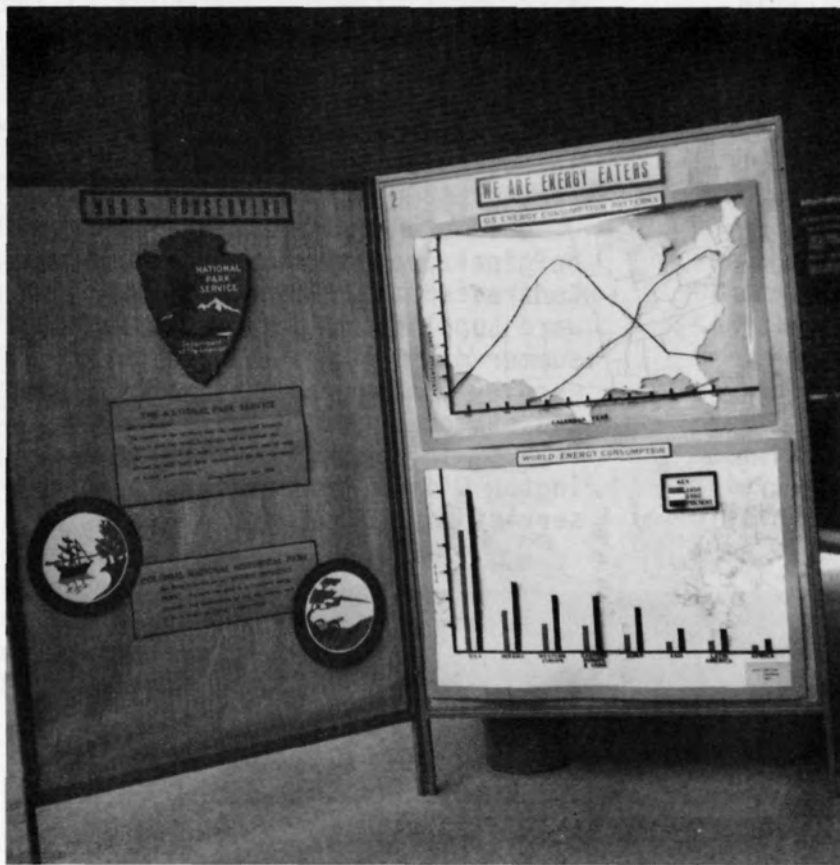
One third of the comments were positive remarks, like the one from Donah Huffstutler of Milton, West Virginia: "I will use this information in the future. Thanks." One third of the comments were negative: "Please, we waited 50 weeks to take a vacation. We stop to see our national heritage here at Jamestown and you give us grief about energy. Enough is enough!" Still another third were about energy saving suggestions such as: "Cut out so many toll booths on I-95. Starting and

stopping causes great amounts of fuel consumption."

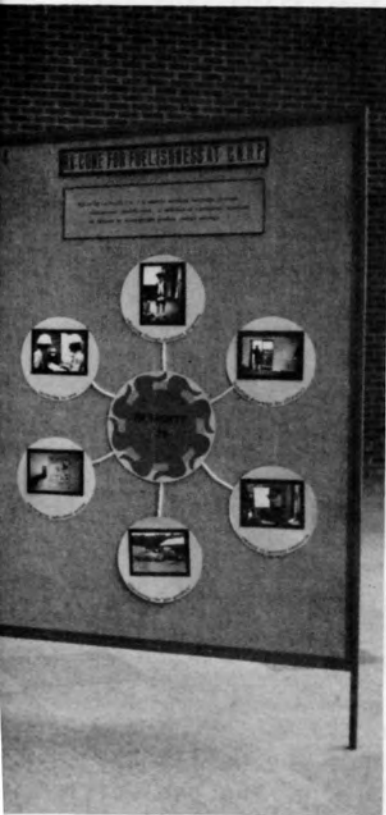
This temporary display at Jamestown is scheduled to be replaced in the early part of 1980 by permanent exhibits at both Jamestown and Yorktown. Guided by the original prototype, a local artist was contracted to prepare exhibits with hardware supplied by the park. Although the summer display was only temporary, it was seen by hundreds of thousands of visitors and promoted energy awareness at the very least. In addition, it was used by Washington Office coordinators as a model for service wide displays.



Jamestown Interpreters, Dwight Madison and Kris Paavola, place the final touch to Colonial's energy exhibit.



The final product: an energy exhibit for Colonial.



FREE LITERATURE

Francie Bailey, Public Affairs Specialist, picked our collective brains in efforts to devise an energy brochure which met all of the following criterion:

How do you get the message of energy conservation across to the public ... a. without inciting riots, b. and simultaneously increase their enjoyment of the park resources, c. but, with a minimum of energy output and cost, d. and a maximum of safety.

The answer was a "how to see" brochure which emphasized the most efficient means of experiencing Colonial's interpretive and recreational activities. As the matter of fact, only activities conducive to energy efficiency were mentioned, like bicycle and bus tours. Walking distances were translated in terms of time.

Further, the energy message was entirely "up front." Take the first two paragraphs, for example:

A day's worth of activities are in store for you this summer. The only cost to you is the \$2.00 per vehicle entrance fee at Jamestown Entrance Station and a small amount of gasoline.

By following these steps, we hope to do our part to minimize energy consumption yet maximize your enjoyment of the park. Many of our summer interpretive activities can be experienced on foot.

Begin at the place of our beginnings ...

In a word, we encouraged people to stay, relax, stroll, enjoy what we have to offer. And, despite the gasoline crunch of the early summer, we noticed a shift in people's priorities. Those that came (around 300,000 to the visitor centers) came to stay longer and became more involved with our interpretive activities.

Dwight Madison, a well seasoned Jamestown interpreter, was author of an energy handout, a bibliography of sources enabling visitors to initiate energy awareness programs of their own. If its success can be measured in terms of the quantity taken, this effort was a smashing success or, at least, well taken. But then again, they could have also been later deposited in a nearby refuse pile, as so often is the fate of vacation literature.



"WHEN THE WELL'S DRY"

Both Jamestown and Yorktown hosted the short energy play, "When the Well's Dry" in mid August. The bulk of the publicity centered around Yorktown since it was the site of the first performance. In addition to public service announcements, press releases and posters, personal invitations were sent to county officials in surrounding areas and park neighbors. The thrust of publicity for Jamestown Island, where a \$2.00 per vehicle entrance station fee is charged, was coupled with that of our "Year of the Visitor" open house, featuring a tour

through the usually off limits artifacts storage room at the Jamestown Visitor Center. For this occasion, the entrance fee was waived for an afternoon.

Approximately 780 persons attended the play during its Colonial engagement. This was slightly below the anticipated response which we had based on the overwhelming response received from "We've Come Back for a Little Look Around." The hot, sultry weather had a lot to do with the lack of attendance, as well as an overall slowdown in visitation due to the gasoline shortage.

Not surprisingly, a few visitors initially reacted cynically or rejected entirely the play because of its energy message. Others felt that it smacked of government "propaganda" techniques, designed to hood-wink the public. However, after the opening interchange between the ranger and father, during which empathy was established, the audience appeared to quickly warm up to the play. The audience also reacted well to the conclusion which ended on a positive note.

The fact that visitors were discussing energy as they departed is indicative of the overall success of the play. "When the Well's Dry" did succeed in promoting energy awareness.

"TOAST"

Frank Studinski, Supervisory Park Ranger at Yorktown, began showing the film "Toast", previously used for seasonal training, on weekends during the summer. Unlike the play, this effort produced little positive and a lot of negative responses. Interpreters introduced the subject of the film at each showing as a short film about the energy cost for a piece of toast. A few visitors felt it was worthwhile. Others stated that they had come specifically to see the site of the last major battle of the American Revolution and, in several instances, verbally tongue lashed the desk attendant for even showing the film. In spite of the forewarning, the major objection was that the film was not related to the park theme.

James N. Haskett
Chief Park Historian



A SEASONAL'S PERSPECTIVE: THE WORD

The Word came down from on high. The Word in interpretation is ENERGY. As a well seasoned interpreter at Colonial National Historical Park, I had heard such edicts before, but this year The Word was given to only six specially selected parks. Immediately, interpreters reacted: quiet compliance, marked indifference, determined enthusiasm and obvious defiance. We greeted The Word with one question, "Why us?" Perhaps it's because we have high visitation figures? Or utility bills? Other questions came out during seasonal training. "You mean money and even ideas are really sources of energy?" "How can we relate energy to a battlefield or an English settlement site?" "Isn't this really all because of the gas shortage?"

It all eventually boiled down to one question, "Were we to be an informational service or a propaganda campaign?" We received no clear answer. We decided to begin with the basic stories of Yorktown and Jamestown. Let's see ... 1. English colonists came to Virginia in ships. 2. ships are powered by wind energy. 3. they came looking for gold - money - energy. 4. they died of disease and starvation, in other words, lack of energy. 5. but germs found abundant sources of energy in colonists. (Wait! We're getting ridiculous!)

As summer programs developed, I observed my fellow interpreters dividing into two camps. The "subtlests" liked to sneak energy concepts into their talks without the visitor knowing. The "explicitists" liked the straightforward, almost blunt approach. Suddenly three new explicitists appeared for a very short time in a playlet called "When the Well's Dry". Ben Franklin, Thomas Edison and Albert Einstein used examples of the past to

suggest guidelines for the future. As I watched, one irate visitor loudly complained, "I didn't come to Jamestown to hear about energy!" I chuckled; he was a member of the cast.

By mid-summer I could see visible results. One interpreter put together a bicycle tour. A five member team constructed a six panel display on energy concerns in record time and with a poverty budget. A mysterious notebook appeared entitled "Energy Ideas" which collected staff comments like, "How long will this BS go on?" and special gems of poetry from the elusive Jamestown Poet. A sign appeared on an office door which said, "To all who enter here, the following words are not to be used in my presence ...

"PRIORITIZE, SIGNAGE, RETROFIT"

You see, energy was not restricted to interpretive efforts alone; we were to "retrofit" our own buildings for better energy efficiency. Retrofit was new to our vocabulary so we looked in every dictionary in the park. We finally had to make up our own definition for the six panel exhibit.

RETROFIT - to modify existing buildings through elimination, modification or addition of equipment, materials, or devices to automatically produce energy savings.

I watched this one little word in action. Maintenance people with clipboards full of statistics appeared everywhere. The Jamestown Visitor Center's thermostats were set at 78°F which kept us somewhere around 84°F. Sunscreens were ordered for all the windows to cut down

solar heat. Unfortunately, their late delivery delayed installation until fall. Park housing was insulated, which drew a sigh of relief from those remembering endless colds and occasional cases of frostbite from past winters. Gasoline consumptive mowing operations were curtailed, which turned huge fields with crewcuts into grassy havens for deer, raccoons and waterfowl. However, the Jamestown townsite suffered the same fate and became a haven for ticks and chiggers, much to the disgust of staff and visitors. Yes, I saw that one single word, RETROFIT, move mountains.

As summer passed into fall, I also saw that most of our attitudes towards energy interpretation did not change drastically, but at least they mellowed and became less hostile; sincerity had infiltrated our energy messages. The energy exhibit was amazingly well received and an empty gas can beside it with a slot in it for visitor comments collected more positive messages than negative. Finally, one interpreter wrote in her end of the summer season suggestions, "I hope that after all the hoopla, energy is not just another fad. I think we have an obligation to attempt to influence public attitudes, not just about temporary conservation but about long range solutions to a permanent problem. Personally, I'm afraid that this is just another fad ..."

My reaction to all this? I have a horrendous urge to scream every time I hear The Word ENERGY ... oops, excuse me for a moment. I need to turn the light off in the bathroom.

Kris Paavola
Park Technician

SELF-IMPROVEMENT AND BEST WISHES

This fall I went back to school at night to fill in the overwhelming gaps in my liberal arts education of a scientific background and in hopes of lending credibility to future energy interpretation through improved understanding. After taking a cryptic course entitled "Evolution of Man and His Environment," I can safely say with some assuredness that "science is the substitution of one error for another." With that cheerful thought, I leave you folks to your creative devices. The ball will soon be in your park. Ciao.

Diane G. Stallings
Yorktown Historian



FORT SUMTER

Fort Sumter National Monument was selected on March 19, 1979 as one of the energy initiative parks based on BTU use per gross square foot, or in simpler terms, energy use in relation to building space. Also, yearly visitation was taken into consideration as the amount of visibility any demonstration project undertaken would receive was important. When these criteria were analyzed and compared with the results of other parks the size of Fort Sumter, the selection was made. Fort Sumter was a winner, or loser depending on your point of view. One way or the other Fort Sumter National Monument uses a lot of energy, primarily for one structure, our recently constructed energy consuming behemoth, the Fort Moultrie Visitor Center. Although designed during the energy crunch of 1973, this structure is totally electric and is a closed environment.

Upon selection as an initiative park the first step was to train staff members to recognize and recommend energy savings projects. These trained personnel became the energy committee and immediately reviewed operations and maintenance procedures and performed level one surveys on all park structures. These surveys resulted in a large energy savings at minimal cost. For example, reduced lighting at Fort Moultrie saved 21,000 k.w. hours of electricity in a year with an estimated reduction in electric bill of \$1,000. To aid in maintaining lights off in areas where fixtures and bulbs remained for evening use, a red dot was placed on the lamp to indicate that it should remain off during the day. As the Fort Moultrie Visitor Center had already been recognized as an energy guzzler, the decision

for level two and three surveys was given the go ahead and an architect and engineering firm was contracted.

The architect and engineer survey during July included an analysis of: insulation on exterior office walls to reduce heat movement; ceiling fans for improved air circulation; vestibules to reduce heat loss; a windmill electrical generator unit; operable windows to take advantage of sea breezes; solar heating system; review of the existing heating, ventilating, and air conditioning system; and a few other projects. A ten year payback period was established as the cutoff point for accepting A & E recommendations. However, a solar panel unit to heat domestic hot water was selected anyway, because demonstration and interpretation advantages outweighed the simple payback. All of these projects had to be planned, bid, and obligated by August 29, 1979. As of January 1980, only three of the selected projects remain to be completed. The level one, two, and three surveys performed by the park staff and the A & E firm has provided an immediate decrease in energy consumption of approximately 16 percent parkwide.

The development of interpretive objectives began shortly after the designation as an energy park was announced. Throughout the preparation of these objectives the primary congressional mandate which provided for the creation of Fort Sumter National Monument was never forgotten. The park was created to preserve and interpret the historical events associated with Fort Sumter in Charleston harbor. To have forgotten this basic mission would have been

an unforgiving error. The basic Energy Interpretive Objectives evolved into a two fold approach-providing information to help the visitor understand and believe the problem and to save his or her dollars by wise energy utilization and reallocation.

Several active and passive methods have been utilized to meet this new park energy objective. Let's look first at the passive methods - the subtle approach. Close association with the local news media was maintained to keep the general public aware of energy related activities within the park. Displays in the Visitor Center were prepared to reflect and to explain what the park was doing. Training of the park staff to use energy wisely was of primary importance, because we were to set an example. Adding a few words to established interpretive programs to emphasize the continuing and changing concern for energy use through time was also an important concept to convey to the public.

Active energy interpretation has taken place primarily in the Fort Moultrie Visitor Center since our major problem is located here and the visitor is not required to pay a fee to reach this facility as is required at Fort Sumter. May 3, 1979 was observed as Sun Day 1979 to "kick off" the new energy park concept. Local elementary schools were contacted to provide art work for competition and local photographic dealers assisted in publicizing a photo contest. The theme for each contest was "the sun". Since the program was well received in 1979, a Sun Day Art & Photo Contest will again be held in 1980 with another energy related theme. For 1980,

Eastern National Park & Monument Association was requested to assist with providing enticing prizes for the winners.

Early in the summer just after public schools had finished their spring term, a park technician attempted to put together an art program at Fort Moultrie. This program was designed to involve elementary children in the historic use of energy at Fort Moultrie and compare that use with modern energy needs through the medium of art. However, the program was begun too late in the school year to reach any success. Most of the summer schools were to fixed in their schedules to allow for late changes as we required.

"When the Well's Dry" was presented by the Franklin S. Roberts Company during the first week of August. Although the play was well done, it was poorly received in the Charleston area. The performances were held at three locations in historic Charleston and in Fort Moultrie with a total attendance of 250 people. Prior to the play on July 19, Franklin Roberts was in Charleston to review the proposed sites and program schedule. He held a press conference which was well attended. The television stations would have preferred to have one of the historical characters with Mr. Roberts to enhance the visual appeal. However, when the press release went out with the play schedule one week before the play was presented, only three weekly newspapers ran the story and most citizens of Charleston did not see the schedule and as a result few attended. Being the first stop on the tour also presented a

few problems. The programs did not arrive until midday of the second day of performances. The posters were also late which required interpreters to work the streets near the play site to improve attendance for each performance. On the other hand, the Charleston city government cooperated extremely well. The Mayor held a news conference and declared the first week of August as "Energy Awareness Week" to coincide with "When the Well's Dry". Although the play made a clear point about energy use, unless attendance can be improved on the tour, the cost per visitor does not justify the play's existence.

Another program which proved to be of little success was presented by a conservation alliance at the Fort Moultrie Visitor Center. The program was to involve a series of eight weekly evening lectures about the nations energy problems for college credit. After these presentations, the program was so poorly attended that it was cancelled.

Before funds were received for a formal freestanding energy awareness exhibit, the park staff prepared several temporary exhibits for display in the Moultrie Visitor Center. To supplement these exhibits and answer questions, the Department of Energy was contacted to provide free information folders which they did in quantities up to 1,000 of each folder. These continue to be well received by the visitor. As one series of folders is depleted, another series is requested from the Department of Energy to insure a continuing supply of up to date information. Other organizations such as utilities and oil companies were requested to provide information. However, these private companies would provide

only enough folders for the immediate staff and not for the general public.

Plans for future active programs to further explain the energy question at Fort Sumter are varied. A subject-to-furlough employee to carry the energy message to the public was employed in October 1979. However, the resignation of a permanent full time park technician and the subsequent loss of that position in December 1979 has required the cancellation of this out reach program.

During the early months of 1980, a series of films for presentation in the Moultrie Visitor Center are planned. Each film will be announced through a press release and presented twice daily for one week. The films were selected to present a variety of approaches to energy conservation and understanding for a diverse audience. The films were obtained through the Department of Energy.

Two working exhibits to explain alternate energy sources are also planned. The question of solar energy to produce hot water and electric current will be explored at Fort Moultrie. Simple displays which convert sunlight directly into electric energy for a small light source will be purchased from sources such as Forestry Suppliers and other science supply houses to demonstrate photovoltaic processes. Since the park installed a solar hot water system on the Moultrie Visitor Center roof in October 1979, much emphasis will be placed on this facility as an exhibit source.

Fort Sumter's location at the entrance to Charleston harbor provides an excel-

lent opportunity to exhibit tidal and wind power as alternate energy sources. Small exhibits which light a small electrical lamp will be constructed on the Fort Sumter dock to take advantage of the constant sea breeze and the swift current created by the daily fluctuations of local tides.

Although the park got into this program in a rush, unorganized, and confused, the confusion and misunderstanding is beginning to subside as we move into 1980. Our programs are professional and

our staff is now prepared to deal with another year as an energy initiative park. And most important, the park is beginning to reallocate energy use to more productive and efficient tasks.

With any new program thrust, the success or failure is often determined by staff support. A special thanks is in order for the interpreters at Fort Sumter National Monument who without their support the energy program would not have been successful.

John Tucker
Chief I & RM
Fort Sumter National Monument



DEPARTMENT OF ENERGY EXHIBIT

More than 19,000 visitors to Grand Canyon National Park this summer toured a mobile energy exhibit and learned some little-known facts about America's energy history, its problems and potential solutions.

The free exhibit, entitled ENERGY, ran June 5-13 and was housed in two 50-foot trailers parked near the South Rim Visitor Center Headquarters. Included in the exhibit--and largely fulfilling its stated goal of providing an overall pic-

ture of the nation's energy problems--were dozens of displays on most forms of energy. A solar-powered tape recorder, a hand-cranked generator, a push-button energy "IQ" quiz, a miniature energy computer and various other displays allowed active visitor participation and effectively transmitted information on basic energy sources and uses in the U.S. An electric car, parked in front of the Visitor Center, pointed visitors to the exhibit. Pamphlets were distributed, comment forms were available and two ex-



hibit managers from the Museum Division of Oak Ridge Associated Universities were present to answer questions and talk to exhibit-goers. As might be expected, interaction was likely and spirited on this complex and often emotional topic.

The exhibit was not without its critics, some of whom expressed themselves in vandalistic terms. On the fourth day of the tour, the words NO NUKES were scratched into the paint on the outside of the trailers in six places, with damage to the trailer siding and graphics estimated at more than \$500.

Most visitor comments indicated that the exhibit was educational, although one person mentioned a significant omission--wood energy. Content in this U.S. Department of Energy exhibition could be construed as leaning toward high-technology, large-scale solutions. Its focus definitely is not one of appropriate technology (small-scale, decentralized, community-based). One 11 1/2 year old visitor noted that there should have been more for the "younger ones." Another commenter praised the National Park Service for bringing such timely information to the public.





Park personnel, who were given work time to attend the exhibit, thought that perhaps the exhibit contained excessive gadgetry and gimmickry, concentrated in a small space. There were no static exhibits.

As hosts, parks must furnish exhibit space, labor to set up and remove the exhibit, media promotion and electrical hookups. It is interesting to note that the exhibit required 100 amp elec-

trical lines, a large requirement for operating a display that offers an energy conservation message. Exhibit managers were anxious to give the traveling show advance publicity by appearing on local talk shows.

More information on contracting for ENERGY is available from Oak Ridge Associated Universities, Museum Division, P.O. Box 117, Oak Ridge, Tennessee, 37830, (615) 483-8411

Set Box

First it was cuddle up to keep warm. Now it's turn out the lights. Who knows what will be next in the rush to save some BTU's.

At the Grand Canyon South Rim Visitor Center at least the latter of these two suggestions was heeded, and results have been encouraging. Six fluorescent light units (24 bulbs) were turned off and 15 track lights replaced 35 overhead spotlights. A new more efficient shape 75-watt quartz halogen floodlight that gives nearly as much light as 150 watt bulbs was installed outside in the Visitor Center vestibule for late-night arrivals.

In Yavapai Museum, a dozen 75-watt units were removed and one of the videotape television sets was switched off.

All of these obvious measures have helped reduce electrical lighting costs by one-fourth.

Bumper Stickers

What's blue and white and sticks to a bumper?

You guessed it. . .a blue and white bumper sticker; they've been seen recently adhering to the rear chrome section of National Park Service vehicles in Grand Canyon National Park.

No, it is not the work of some sticky-fingered, midnight marauder. The idea came up in the Interpretive Division, as a way to make the public and park employees more aware of Grand Canyon's raised energy consciousness.

As one of the nation's six energy initiative parks, Grand Canyon officials thought it was wise that the park show the public the gasoline mileage that park vehicles attain, while also supplying an internal impetus to the staff to consider the efficiency of the vehicles they drive or are responsible for.

In some cases, divisions have the opportunity to select a more efficient car or truck. When miles-per-gallon is posted conspicuously on the posterior bumper, the choice may frequently be for a smaller vehicle.

An area printer was hired to design the sticker. Silk-screened on the vinyl strips are the words, "This vehicle gets ____ MPG." The blank is filled in appropriately for the particular car or truck. To determine mileage, park maintenance department records were consulted. These statistics can also be obtained from the General Services Administration, though they are class-type, average ratings that may not reflect the actual operation conditions for vehicles in a specific park. The blanks on the stickers can be numbered with stencils and spray paint or with vinyl adhesive numbers.

The project's goal is to apply stickers to all vehicles except certain heavy-duty, specialized vehicles whose use and efficiency is relatively inflexible.

A more efficient vehicle fleet is part of the park's overall aim to reduce energy use by 20 percent by 1985.

Two hundred stickers were printed at an average cost of 55 cents each. The Grand Canyon Natural History Association donated funds for printing.

Now that the project has begun, park officials hope it sticks!

Energy Interpretation

"When you think about it, just about anything at the Grand Canyon can be explained in terms of energy."

Those are the words of one Grand Canyon interpreter, Larry Stumpf, who rose to the challenge of adding an energy message to his usual interpretive programs.

Stumpf and fellow interpreters heeded training suggestions and wove some clever energy themes into nature walks, geology and history talks, and rim talks.

--On a mining history walk to the Orphan Mine site, ranger Elden Walters discussed uranium mining in a national park; the mine, which has a valid claim through 1987, is not operating because ore removal is not economically profitable.

--Veteran seasonal Tim Manka had his Junior Rangers take their pulses before and after running to introduce the idea of the body's use of energy. On another Junior Ranger program, the Sun Exercise, a yoga posture that is a salute to the Earth's major energy source, was demonstrated.

--Several rangers used the forum of geology walks to discuss the proposed Hualapai Dam, a hydroelectric facility on the Colorado River, and its possible effect on Grand Canyon's future. It was an ideal opening to question energy use, promote wise use and discuss the national park philosophy.

--Howie Asaki, an interpreter on the West Rim Drive this summer, included energy and resource management in many talks. The demise of the prehistoric canyon dwellers was possibly due to unwise use of resources. On wildlife talks, Latke's energy principle was explained, to illustrate that with given, finite amounts, those animals that used energy most efficiently were the ones that survived.

--A student conservation assistant who led Grand Canyon's first guided "Ranger Run" told fellow joggers about body metabolism and how plants use energy.

And, of course, the obvious analogy of the Canyon itself as an energy system--primarily the force of water as the chief factor in the continuing process of erosion--was often mentioned.

Energy interpretation may be the equivalent of what environmental education was ten years ago. Basically they are the same concepts, dressed up in new jargon. It will simply take some "re-tooling" on the part of interpreters, plus a little information and imagination, to pass the word.

Energy Exhibit

How is the silky pocket mouse like a storm window? Answer: when it piles dirt in front of its burrow to insulate its home from heat and cold.

This similarity and others in the mouse's behavior and that of humans trying to conserve energy will be illustrated in an exhibit being designed for the South Rim Visitor Center at Grand Canyon National Park.

Responding to its desert environment, the silky pocket mouse (Perognathus flavus) has had to adapt to survive. Some of those adaptations, which will be described in the energy exhibit, include its entry into a torpid state each day during times when food is scarce. By doing this, it slows down the body's functions so that less food and energy are needed.

As the exhibit notes, people cannot physically lower their energy needs. But through mechanical alterations to buildings, the same energy-saving ends can be attained.

As a perfect introduction to the exhibit, visitors must first pass through vestibules that have been specially built at the Visitor Center entrance.

These glass foyers are comparable to the pocket mouse's practice of piling dirt in front of its burrow openings, to keep out the hot, dry desert winds and winter chill. The same effect is achieved with storm windows, insulation and weather stripping on homes and buildings.

The four exhibit panels will include illustrations of the pocket mouse and its burrow as well as a chart showing projected and actual energy savings from the vestibules.

A designer with the Museum of Northern Arizona in Flagstaff is working with park employees and the Grand Canyon Natural History Association in designing and constructing the exhibit. It will remain in the Visitor Center lobby indefinitely.

Rose Houk
Interpreter
G.C.N.P.



SHENANDOAH NATIONAL PARK

PLANTING THE SEED

For the staff at Shenandoah National Park as well as all of us involved with the energy interpretation initiative, the first task was once again to struggle through yet another wrenching introspection of what we are all about; what is the mission of interpretation; whom do we serve, and why? The challenge clearly presented to us at Colonial National Historical Park last May was how to accommodate the function of helping people enjoy the resources we protect for them, with the added goal of producing an energy ethic in the minds of Americans. Immediately we recalled the "thrust" syndrome and feared that we were merely being issued our marching orders for this year's "thrust". But reasonable and open minds sharing thoughts, ideals, hopes, and criticisms at Colonial produced a fairly clear picture of what we were going to do, and why we were going to do it.

It took little to convince us that better energy awareness would be a good thing; for the world, for us, for parks. While we are not educators with a mandate to revolutionize people's thinking, we could plant the seed of thought which leads to more responsible energy use. Moreover we could do this without subordinating the interpretation of our parks, by merely telling our story with the energy aspects woven (not sledge-hammered) in. No problem; but how a hoard of harried turned-off tuned-out visitors? Ah, therein lies our next challenge; at what level do you inspire without insulting? This problem is what we spent a summer solving. That is what this experiment in energy interpretation was all about.

Putting Energy Into The Program

At Shenandoah, we tried to infuse energy interpretation into our live programs on two levels: one was to produce new programs about energy from the ground up, the other was to spice all the rest of the programs with just a pinch of energy flavoring. Park Naturalists started three new programs with varied approaches and varied degrees of success; but all had the same objective of telling a part of Shenandoah's story using energy as its dominant theme. Kay Rohde wrote an evening program about water. Water falls into the Park, makes beautiful music with the rest of the elements while there, then flows out into the industrialized world. With this program, Kay showed how moving water is energy, that water flows like energy, and that the Park and its natural resources are one with the whole region and world. This was a beautiful program which flowed like its subject, but we weren't sure we made the point.

Barbara Stewart tried encouraging conservation of fossil fuels with an evening program stressing the beauty to be discovered by slow, careful, leisurely inspection of this environment ... out of a motor vehicle. She made her point so well she was nearly torn apart by her audience. In time she was able to tone-down the condemnation of fuel use and turn-up the music of the natural values to a point of happy medium. The third program was an afternoon sit-down activity presented by Terry Thompson. Terry used props (a ball of yarn which tied people and elements together, bottles of air and soil, seeds, etc.) to explain how energy flows through the

natural systems evident at Shenandoah. This program was very effective, and its best touch was a quick allusion to fossil fuels and how they fit into the natural flow chart.

There are many ways of bringing energy into a program, ranging from tacking on a commercial (we discouraged this) to a subliminal message slid into the program unnoticed (and unheeded?). But we found that since energy is everywhere, it naturally can be discussed with everything. In David McCollum's weather program, the role of the sun's energy is obvious. Not so obvious is the application in Barbara Maynes' presentation on Mountain People. But her whole theme was to relate these earlier people to the natural environment and to contrast their culture to "modern" living. Use of energy sources then and now was a natural. In her geology program, Kath Gardner contrasted flow of energy and cycling of matter. Even a point as obtuse as the second law of thermodynamics was made clear in Gerald Roe's introduction of entropy as a part of nature's harmony. We found that once people started to think about it, energy would just jump into the conversation. During a night walk, Bill Hudson, on discovering a lightning-struck tree, could not help but say, "Just think of the energy released when that happened."

Special Events and Activities

In some of our activities, featuring energy is not as much of a problem as with the main interpretive program. In environmental education, fostering awareness is the name of the game. We presented a teacher workshop last spring in which energy (what else) was the

theme. Now here, there was no conflict. This was how it was advertised, and this is what the customers came for. Our objective was to show how energy is flowing through everything and that energy economics is a part of the economics of all aspects of life. We showed how these points could be illustrated to children with various games we devised. Food chain games are always fun and are good for energy flow. In our workshop, Nancy Walker and grasshoppers picking up popcorn, frogs catching grasshoppers, and hawks catching frogs. Karen Brantley showed how animals conserve energy output through communications and had us out following a scent trail. I borrowed from my own children's TV experiences with "Super Friends" who change forms in their efforts to help mankind. I showed how energy is like these teenagers from outer space, and we all tried to find our "super friend" in common objects, tracing its flow.

Any discussion of this summer's energy interpretive efforts at Shenandoah would have to include the outside help we received in the form of special programs presented on contract. One of these was the Department of Energy's exhibit, "Energy" produced by Oak Ridge Associated Universities. This facility uses exhibits to dramatically illustrate many points about energy economics and energy technology. There is no question that this vehicle does the job of educating the public in areas of general ignorance or misunderstanding. Our problem was that after our soul-searching quest for a mission and purpose, these two bright-colored energy consuming 50 foot trailers, in front of a visitor center had a jarring effect.

They just didn't meet the standards we set up for ourselves. But put into perspective, it is clear that such a program definitely has its place along-side ours in the whole effort of energy responsibility.

As part of the six-park energy emphasis, WASO funded the production, "When the Well's Dry," an energy play by Franklin Roberts Productions. This was professionally done, very entertaining and obviously effective in stirring thoughts about energy use and energy myths. On the scale of obviousness by which we measured our own programs, this was certainly closer to the sledge-hammer end, but it was clearly separate from our programs and complimented them in a manner we never could have employed.

So what did we at Shenandoah find out about our ability to interpret energy in our Parks? I think we were pleasantly surprised. It didn't hurt as much as we had feared. We found that a special message can be included in our basic story as long as it is made a part of the story. We found that a subject as all encompassing as energy dynamics slips naturally into all areas of park inter-

pretation. We found that experimentation and individual approaches will show us what level to use. And we found that we were not dealing with two missions, but still the same big picture; assist our visitors in their enjoyment of their park by helping them understand and appreciate all of the natural and cultural relationships. Too often we worry that our functions are either too provincial (confined to our particular park without saving the Earth) or too broad (attempting to accomplish more than we were mandated to). But if we come off the forest floor and look back at ourselves in the whole picture, we can see that we Park Interpreters are part of whatever great mission we want to be part of. Each of us interpreting our individual parks, collectively add up to a whole, one whole program of fostering appreciation for parks, for the environment, for the Earth. And the Earth runs on energy.

Chuck Anibal
Assistant Chief Park Naturalist
Shenandoah National Park



SET AN EXAMPLE

It is one thing to change people's concept of energy, and quite another to change their lifestyles. We can help people relate the magic that turns on their lights with a flip of a switch to the energy which flowed from the sun millions of years ago. We can show them how this energy was stored through the ages in deep oil reservoirs until mankind discovered its powers. We can even ask people to enlarge their comprehension of energy; to associate that power that supports their lifestyles to the energy powering the natural systems of Shenandoah National Park. But how can we convert this understanding into a real commitment to change; a willingness to be more responsible about using this limited resource so that we and our environment can survive?

What better way than to try to set an example? At Shenandoah, we decided not to just talk about Energy Conservation; we did it! We not only conserved energy, but we also advertised how we were doing it and gave park visitors an idea to take home. Our Energy Conservation Program became two-fold! We first found ways to use less energy and cut down on waste, then we shared our successes with visitors by telling them what we were doing and by inviting them to join us in using our resources more wisely.

One large user of energy is waste. Waste in any form means energy is expended to remove waste as well as large amounts of energy used to create new supplies. One way to reduce waste as well as energy use is through recycling waste material. Recycling can be a highly visible program, in which visi-

tors can participate, and it can be related to recycling in natural systems.

We have been involved with a number of different recycling programs here at Shenandoah National Park. A school class from Elkton, Virginia approached the Park with a newspaper recycling plan. They established collection centers in the Park for gathering newspapers. One was located at Park Headquarters and one at Byrd Visitor Center. The students provided bins for collection of the newspapers. These were visible to Park visitors and old newspapers, donated by campers and Park employees, began to accumulate. The class figured how much newspaper would save one tree and then placed a gauge on the bins so contributors could see results. As the paper drive grew, the class designed an exhibit explaining their purpose and devised a way to post their success. A large tree was painted on a strip of paper that reached from floor to ceiling. Numbers climbing up on side represented trees that were saved. As newspapers were collected and figures compiled, an arrow recording our progress was posted at the number representing the number of trees we had saved.

Newspapers was not the only paper to be recycled. The Park operation generates much waste paper. Tom Tate, our Supply Officer, suggested that rather than throw away many loose sheets of paper, those sheets that had only been used on one side be collected and made into scratch tablets. After that was done, there was still too much waste paper in the trash cans. We went back to that concerned group of students in Elkton

for a solution. They had access to a paper shredder, the preliminary step in paper recycling and could take care of our waste paper. A small collection box marked "RECYCLE" was placed in every office through the Park. At regular intervals, the Recycle boxes were emptied and the paper stored for collection and transportation to the shredder.

Aluminum collection was undertaken in all of the campgrounds. This was in addition to the can deposit required of all food packaged in aluminum containers sold in the Park. Trash cans labelled "ALUMINUM ONLY" were placed in the campgrounds. Sorting and transporting the cans to a collection point fifty miles away was done by campground rangers. Some problems developed with other garbage being dumped into the Aluminum receptacles, which meant lots of extra work sorting (translated into time which we did not always have). In an effort to discourage visitors from dumping garbage into Aluminum-Only barrels, rangers at one campground moved the collection area to the campground registration station which allowed some control as well as affording an opportunity to invite the campers to recycle their aluminum as they registered.

Shenandoah gave recycling and its role in Energy Conservation plenty of publicity. A recycling exhibit was displayed at Byrd Visitor Center for much of the summer. Six panels on an Expo Frame graphically explained recycling's economic value, energy savings and resource conservation, at the same time comparing it to the natural recycling that is a part of the Shenandoah Ecosystems. Several posters urging visitors to participate in the

aluminum and paper recycling programs were prepared and exhibited on bulletin boards in the campgrounds and near the campstores.

Members of the Naturalist Staff took every opportunity to discuss energy-saving activities with Park visitors. Much of the building retro-fits were not particularly visible to visitors, but as retro-fits were planned and done, word was passed to the Naturalist Staff. Details were provided as to what was done, and more importantly, how much energy and money would be saved. Efforts were made by employees to car pool and consolidate trips and visitors were encouraged to car pool to and from naturalist-conducted activities. For MPG, Park vehicles, bumper stickers were purchased reading: "This Vehicle Gets ____ Miles Per Gallon."

We emphasized walking - leaving the Skyline Drive and our vehicles behind, and seeing Shenandoah without using fossil fuels. All those in favor of saving gas, raise your right FOOT. In addition to encouraging visitors to venture out on foot, backcountry rangers and campground patrols were accomplished by rangers on foot, reducing that addicting dependency on motor vehicles.

Setting an example is continuing. As more and more of the building and facility retro-fits are completed and results seen, they will be publicized on bulletin board posters. During the low visitation period this winter, unnecessary lights and audiovisual equipment are being turned off until needed. Personnel are explaining to visitors why park management and the concession decided to close

most facilities during the two coldest and lowest visitor months. Having only entrance stations and a visitor center open, provides excellent opportunities to explain what we are doing.

Shenandoah is conserving energy. We are cutting down on vehicle use, recycling wastes, and heating our buildings more efficiently. So who are we trying to im-

press? Everyone we can! We are trying to make an impression by what we do as well as by what we say. If enough people get the message, we can reduce energy use by our visitors, and that is what this program is all about.

Kay Rohde
District Naturalist
Shenandoah National Park



ENERGY AT INDEPENDENCE

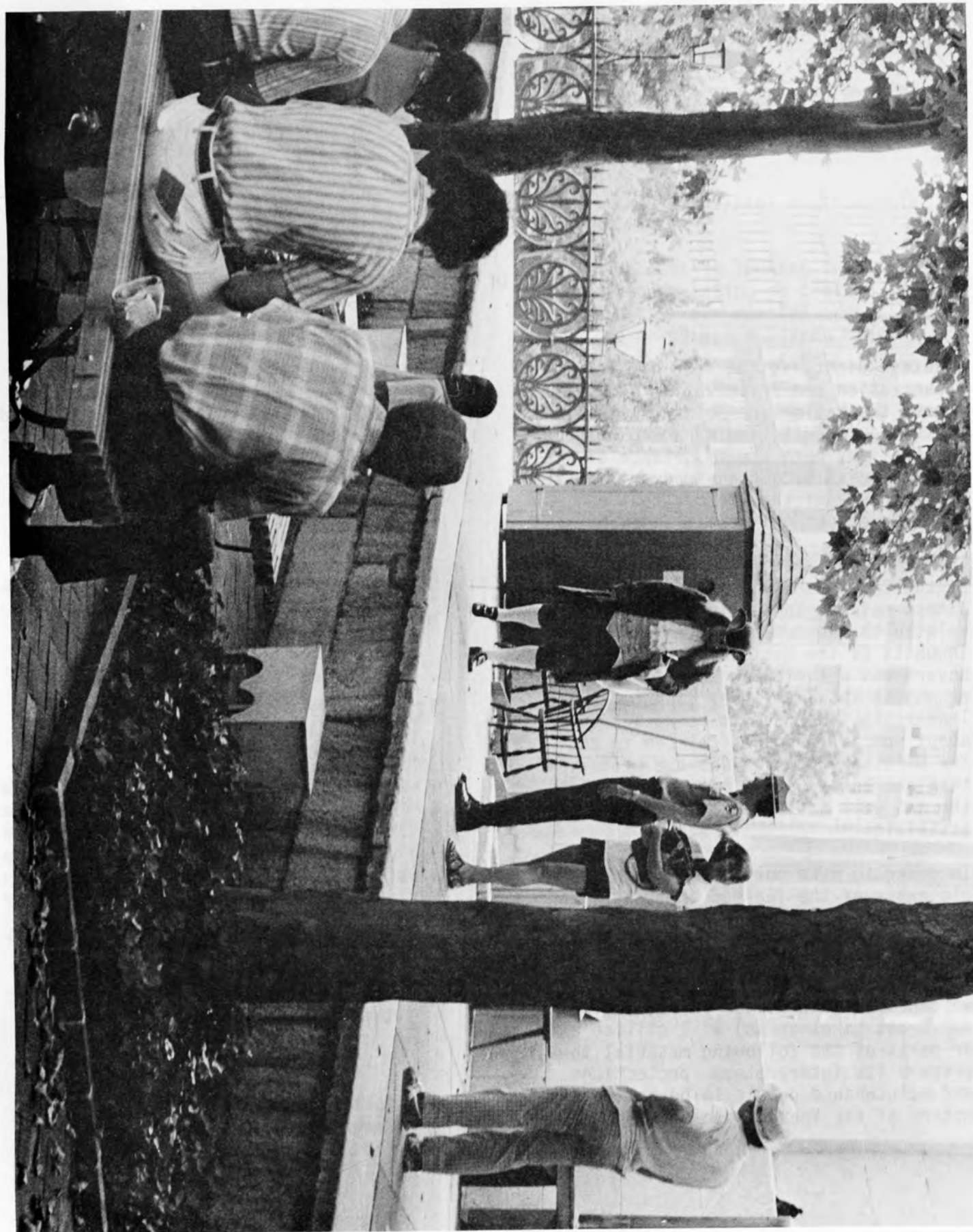
It is appropriate that Independence National Historical Park, which features so many sites associated with the inventor of the Franklin Stove, was selected as one of the six energy demonstration parks. Just as Benjamin Franklin's idea contributed to the more efficient use of energy, we hope that our efforts will instill our visitors with an awareness of the need to conserve energy today. As it turns out, Franklin himself, has come back to lend us a hand. He, along with Thomas Edison and Albert Einstein, appear in a play entitled, "When the Well's Dry". The title of the play comes from "Poor Richard": "When the well's dry, we know the worth of water". In the play, the three historical figures meet with two present-day Park visitors and a Park Ranger to offer three different historical perspectives on our present energy problems. The play, which was produced by Franklin S. Roberts (producer of "We've Come Back For A Little Look Around") and co-sponsored by the National Park Service and the Philadelphia Cultural Affairs Council was shown throughout the summer and was enjoyed by almost 12,000 people.

In addition to "When the Well's Dry", we have been promoting energy awareness among the Park staff and our visitors in a number of other ways. Park interpreters are focusing more and more on the differences and similarities in energy

use between the eighteenth century and today. We are also in the process of having an exhibit prepared to tell of our role as an energy demonstration park. Another thrust in our efforts is the promotion of the use of mass transit among our visitors. To that end, we have been sending a handout sheet to perspective visitors which urges them to use public transportation and provides information on the Philadelphia transit system. We also cooperated with Valley Forge National Historical Park to publicize their experimental shuttle bus which operated between Philadelphia and Valley Forge. Future plans call for the presentation of special programs to the Park staff to keep them abreast of our activities as an energy demonstration park.

While our efforts may not have the lasting effect that Ben Franklin's Stove has had, it could be that our efforts, along with those of others, combine to modify attitudes toward energy use and, perhaps, even inspire some future inventive geniuses to develop solutions to our current problems.





RAP UP



YEAR OF THE COAST

Nineteen-eighty is the Year of the Coast. Conservation and preservation groups across the Nation are joining with local, state and federal land managing agencies to highlight both the importance of a healthy coast to our environment and the significance of the history that has been played out on America's seaboards.

The NPS plays a pivotal role in the Year of the Coast. Many of the country's finest natural and cultural resources related to the coast are contained within units of the National Park System. Government agencies and citizen groups promoting YOC activities look to us for leadership. Many visitors will inquire about special programs related to YOC. The Director has promised the preservation and conservation communities that the NPS will actively participate in YOC activities.

In order to make our public contact people aware of the Year of the Coast, In Touch offers the following proposed course outline for a training program for seasonal and permanent staff members. What we hope is that each area (as best we can count, the total is 51, including our Great Lakes areas) will utilize all or parts of the following material to prepare its interpreters, protection, and maintenance people to be active promoters of the Year of the Coast.

The outline for the proposed training program is largely the product of Chris Bauman, interpreter at Cumberland Island, and Harry Butowsky, Cultural Resources Division, WASO. To simplify matters, the program is translated into the kind of educational shorthand that all of us recognize, even though we may not much like it. Rick Smith, YOC committee member, is responsible for the translation. Please direct comments on the plan to us here at In Touch or to him.

PROPOSED GOALS

1. To unify efforts in promoting the protection and interpretation of the natural and cultural resources of the coasts.
2. To develop the ability of the participants to convey the uniqueness and fragility of these resources and the results of human interaction with them to area users and the general public.
3. To identify the park employee's role as a key element in protecting these unique resources.

OBJECTIVES

1. Participants will have an increased knowledge of basic principles of

coastal ecology, geology, and current environmental threats to coastal areas. The concept of the coast and its barrier islands as a unified and interrelated system will be emphasized.

2. Participants will have an increased knowledge of the basic principles of cultural resources management, including the philosophy, inventory, preservation, treatment and compliance requirements relating to cultural resources management. The significance of human history and prehistory associated with coastal areas will be emphasized.
3. Participants will have a sound information base from which to develop and evaluate community outreach and environmental education programs targeted for coastal areas surrounding NPS units.
4. Participants will develop interpretive programs which reflect the vulnerability and value of the coastal environment and the story of human use and adaption to coastal and marine environments.

CONTENT

What follows is not meant to be inclusive. It is simply a list of topics which might be covered. The topics actually chosen will depend on training resources, applicability, time available, staff sophistication etc.

The Coastal Environment-Natural Resources

- an overview of the barrier islands of the United States

- coastal vegetation--a lesson in adaptation

- wetlands

- coastal geology

- approaches to coastal environmental education

- from the outside looking in--a panel discussion relating to citizen involvement in our coastal areas. Members of the Coast Alliance have expressed their willingness to participate in such panels.

- resources management in coastal areas--the role of the interpreter

The Coastal Environment--Cultural Resources

- overview of cultural resources management

- submerged pre-historic, historic resources

- forts, lighthouses, archeological and other cultural resources on the land

- problems of visitor use and visitor safety in submerged cultural resources

The Coastal Environment-Its Interpretation

- A certain amount of time would be spent in the preparation of interpretive material. Experienced staff members would assist new seasonals get ready for the summer season.



EDITOR'S NOTE

Our Cover Artist/Cartoonist, Keith Hoofnagle, has been doing artwork for IN TOUCH for six years, first while working as an Exhibit Planner at Harpers Ferry Center, and later as a Park Naturalist at Hawaii Volcanoes and most recently Olympic National Park. The National Park Service background he draws from (no pun intended) includes a decade of summers as a seasonal Fire Control Aid and Naturalist at Yellowstone National Park as well as seasonal and permanent employment as a Ranger at Saguaro National Monument.

Belatedly, we wish to thank Keith's Supervisors (Bob Johnson, Glen Kaye, Dale Thompson, and John Douglass) who were generous enough to share his talents with others in the National Park Service through IN TOUCH over the years.

A recent memo to the Director from the Superintendent of Olympic National Park states that Hoofnagle will no longer be allowed to do artwork for IN TOUCH on the job.

Please bear with us during this transition period. We are hoping to have Hoofy and his irrepressible Rangeroons back with us in a future issue, but in all fairness we must try to find a way to pay him for his artwork if he will be required to do it on his own time.