

Ronald Reagan Presidential Library
Digital Library Collections

This is a PDF of a folder from our textual
collections.

Collection: Deaver, Michael
Folder Title: May 1985 Incoming and
Outgoing (2)
Box: 25

To see more digitized collections
visit: <https://reaganlibrary.gov/archives/digital-library>

To see all Ronald Reagan Presidential Library inventories
visit: <https://reaganlibrary.gov/document-collection>

Contact a reference archivist at: reagan.library@nara.gov

Citation Guidelines: <https://reaganlibrary.gov/citing>

National Archives

Catalogue: <https://catalog.archives.gov/>

WITHDRAWAL SHEET

Ronald Reagan Library

Collection Name DEEVER, MICHAEL: FILES

Withdrawer

KDB 7/29/2011

File Folder MAY 1985 INCOMING AND OUTGOING (2)

FOIA

F97-0066/19

Box Number 27

COHEN, D

64

DOC NO	Doc Type	Document Description	No of Pages	Doc Date	Restrictions
1	FORM	TRAVEL VOUCHER (PARTIAL OF FRONT)	1	ND	B6
2	LETTER	JOHN LOUGHNEY II TO DEEVER (PAGES 2-3, PARTIAL)	2	4/23/1985	B6

Freedom of Information Act - [5 U.S.C. 552(b)]

- B-1 National security classified information [(b)(1) of the FOIA]
- B-2 Release would disclose internal personnel rules and practices of an agency [(b)(2) of the FOIA]
- B-3 Release would violate a Federal statute [(b)(3) of the FOIA]
- B-4 Release would disclose trade secrets or confidential or financial information [(b)(4) of the FOIA]
- B-6 Release would constitute a clearly unwarranted invasion of personal privacy [(b)(6) of the FOIA]
- B-7 Release would disclose information compiled for law enforcement purposes [(b)(7) of the FOIA]
- B-8 Release would disclose information concerning the regulation of financial institutions [(b)(8) of the FOIA]
- B-9 Release would disclose geological or geophysical information concerning wells [(b)(9) of the FOIA]

C. Closed in accordance with restrictions contained in donor's deed of gift.



NATIONAL WILDLIFE FEDERATION

1412 Sixteenth Street, N.W., Washington, D.C. 20036

202-797-6800

May 6, 1985

Thank

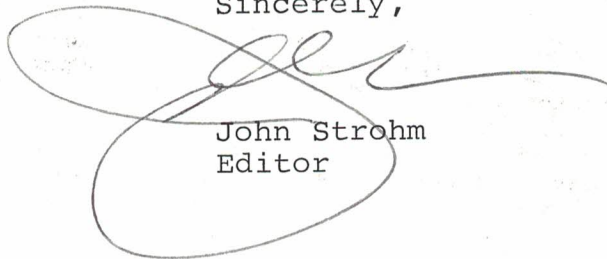
Mr. Michael Deaver
The White House
1600 Pennsylvania Avenue
Washington, D.C. 20500

Dear Mike:

I am enclosing an advance copy of National Wildlife which contains the exclusive interview I had with President Reagan. This magazine will be going into 900,000 homes later this month.

Mike, again I want to thank you for helping make this interview possible. And I wish you all of the best in your new venture.

Sincerely,



John Strohm
Editor

Enclosure

National WILDLIFE

JUNE-JULY 1985

PUBLISHED BY THE NATIONAL WILDLIFE FEDERATION



EXCLUSIVE
**Our talk with
President Reagan**
Page 16

Have a Good Eye?

There's still time to enter
National Wildlife's fifteenth annual
photo contest. The deadline is June 30.
For more details, turn to page 28



EDITORIAL CREED:

To create and encourage
an awareness among the people of the world
of the need for wise use and proper
management of those resources of the Earth
upon which our lives and welfare depend:
the soil, the air, the water, the forests,
the minerals, the plant life and the wildlife.
Dr. Jay D. Hair, Chairman, Editorial Board

NATIONAL WILDLIFE FEDERATION

Board of Directors

**Carl N. Crouse, President and
Chairman of the Board**

**Leonard A. Green, George H. Hulsey,
Ernest E. Day, Vice Presidents**

Directors

Ralph W. Abele, Phil E. Alexander, Virginia Beall Ball, Frank E. Copeland, Jr., Burnett C. Dahl, Richard Day, Delano Deen, Benjamin C. Dysart, III, Robert H. Gardiner, Jr., John S. Gottschalk, Donald Hamilton, Charles T. Haskell, Walter H. Hoff, Ervin G. Kreischer, Anne LaBastille, Henry Lyman, Gordon G. Meyer, Rudolph J. H. Schafer, Phillip W. Schneider, Clarence A. Schoenfeld, Frederick R. Scroggin, Gene G. Stout, William E. Towell, Hester L. Turner, Paul H. Wendler, C. Clifton Young; Harry Val, Treasurer.

Honorary Presidents

Claude Moore,

Thomas L. Kimball, Joseph Y. Hickman

Past Presidents G. Ray Arnett, Benjamin C. Dysart, III, Paul A. Herbert, Claude D. Kelley, Louis D. McGregor, Walter L. Mims, Frederick R. Scroggin, C. Clifton Young, Donald J. Zinn. Joseph D. Hughes, Greer Ricketson (NWF Endowment, Inc.)

FEDERATION EXECUTIVE STAFF

Jay D. Hair, Executive Vice President

**James D. Davis, Senior Vice President for Membership
Development and Publications**

**A. Dale Clark, Senior Executive Assistant to the
Executive Vice President**

Alric H. Clay, Vice President for Administration

James R. De Santis, Vice President for Public Affairs

Francis A. DiCicco, Vice President for Financial Affairs

**Lynn A. Greenwalt, Vice President for Resources
Conservation**

William W. Howard, Jr., Vice President for Affiliate Services

George A. McMahon, Vice President for Operations

**S. Douglas Miller, Vice President for Wildlife Research
and Program Development**

John C. Stone, Vice President for Conservation Education

Joel T. Thomas, General Counsel

Regional Executives

Bruce N. Apple, Pacific Northwest; Robert E. Apple, South Central; Wayne Baron, North Central; Thomas J. Dougherty, Mid-Atlantic; Ed Easton, Caribbean; Dale T. Gaskill, Western; Charles J. Griffith, Northern Rockies; David L. Herbst, Western Great Lakes; Russell R. Hyer, Central; George A. Kaminski, Rocky Mountain; Larry J. Schweiger, Eastern Great Lakes; Charles Shaw, Southeast; E. Warner Shedd, New England.

Federation Offices

Correspondence about memberships, magazine deliveries, nature merchandise, contributions and general conservation matters should be addressed to the National Wildlife Federation, 1412 16th Street N.W., Washington, D.C. 20036. Article proposals and photographs should be addressed to Editor, *National Wildlife*, 1412 16th Street N.W., Washington, D.C. 20036. *National Wildlife* cannot be responsible for unsolicited material.

Change of Address

Allow six weeks for change to take effect; send both old and new addresses to National Wildlife Membership Services, 8925 Leesburg Pike, Vienna, Virginia 22180

National Wildlife (ISSN 0020-9112) is published bimonthly by the National Wildlife Federation, a nonprofit corporation, 8925 Leesburg Pike, Vienna, Virginia 22180. Second class postage paid at Vienna, Virginia, and at additional mailing offices. Printed by Holladay-Tyler Printing Corp., 1900 Chapman Avenue, Rockville, Maryland 20852. National Members receive *National Wildlife*; International Members receive *International Wildlife*; annual dues for each \$12.00. World Members receive both magazines; annual dues \$19.00. Add \$2.00 for *National Wildlife* or *International Wildlife*, \$4.00 for World Associate Membership for address outside United States. Life membership \$500.00.

Copyright 1985 by the National Wildlife Federation. All rights reserved.

Postmaster: Send address changes to *National Wildlife*, 8925 Leesburg Pike, Vienna, Virginia 22180.



National WILDLIFE®

Volume 23, Number 4

June-July 1985

A Talk with Ronald Reagan

AS EVERYONE agrees — from Tip O'Neill to the folks who voted for him in a 49-state election sweep — President Ronald Reagan is a warm and charismatic person who makes you feel at home, even when he's in the Oval Office. (See our exclusive interview, page 16.)

When I visited with him, we talked about the amazing variety of wildlife on his ranch, including bears and mountain lions, and he said he loved them all — well, all, that is, except the ground squirrels. And then he quickly added that they're considered a pest in California.

As I was leaving, he recalled the day that one of his Secret Service men came running out of the woods on the ranch. Everyone could see he was scared to death. It turned out he had just come face-to-face with a big mountain lion. And he hadn't had training for that sort of thing!

I asked how he would feel about us sending out one of our crack nature photographers to take pictures of the wildlife found on his ranch. He paused momentarily, then said, "Well, you know mountain lions just don't sit around waiting to have their pictures taken."

After you've read the Reagan interview, I'd appreciate having your personal reactions.

John Strohm
EDITOR

EDITORIAL STAFF

John Strohm Editor
Bob Strohm Executive Editor
Mark Wexler Managing Editor
Dan Smith Art Director
John Nuhn Photo Editor
Jonathan Fisher, Russ Rymer, Patricia Daniels Senior Editors
Stephen B. Freligh Associate Editor
Eileen M. Levitan Assistant Photo Editor
Leah Barash Assistant Editor
Mark R. Bacon, Phyllis Nunn Art Associates
Sally Blackburn Staff Assistant
Kathy E. Groves Editorial Secretary
Phyllis Lehmann McIntosh Contributing Editor
George H. Harrison Field Editor
Roger Tory Peterson, Norman Myers, John K. Terres Roving Editors
James D. Davis Senior Vice President for Publications
Priscilla Sharpless Quality Control



4 HUCK FINN'S RIVER ROLLS ON

By Russ Rymer

The Mississippi has undergone some dramatic changes in the hundred years since Mark Twain wrote his novel

12 THE CROC HOLDS ITS OWN

By Mike Toner

The endangered reptile is surviving in some unusual haunts in southern Florida

16 INTERVIEW: RONALD REAGAN

Editor John Strohm's exclusive interview with the President

20 NIGHT STALKER

By Mike Lipske

Washington, D.C., is the setting for an intensive study of urban raccoons

25 REPORT ON NWF ANNUAL MEETING

Federation's Growth Gives Muscle to Programs

29 IN ONE DAY

By Tom Parker

Americans can rack up some astonishing statistics

30 SMOOTHING THE WAY FOR SALMON

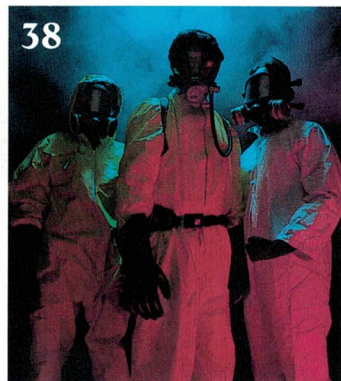
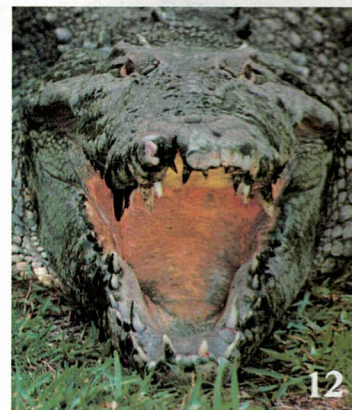
By Phillip Johnson

Throughout the Pacific Northwest, volunteers are restoring streams to help the fish

38 STRIKE FORCE

By Mark Wexler

In Los Angeles, a tough investigative team is making life miserable for corporate polluters



42 DO BIRDS HAVE A MEMORY?

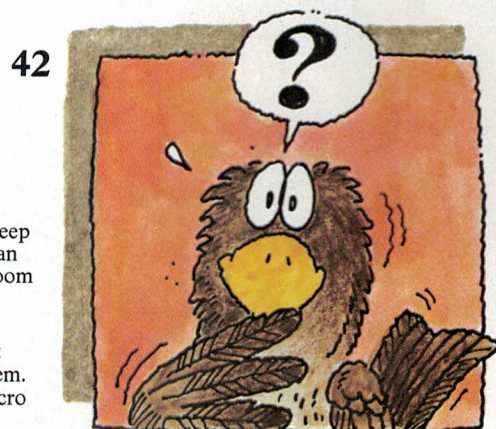
By Peter Steinhart

Our feathered friends may be smarter than we thought

46 WHERE BEACH MASTERS REIGN

By Fred Bruemmer

An intrepid journalist spends an unforgettable summer in the midst of thousands of Steller sea lions



ABOUT OUR COVERS

Front: Steve Kaufman photographed two Dall sheep resting in Alaska's Denali National Park. Kaufman used a Nikon F2 camera, a Nikkor 80-200mm zoom lens and Kodachrome 64 film.

Back: In a Michigan woodland, Ted Nelson photographed a brown-winged red skimmer, wet with morning dew, clinging to a rose pogonia stem. Nelson used a Pentax MX camera, a 100mm macro lens and Kodachrome 25 film.



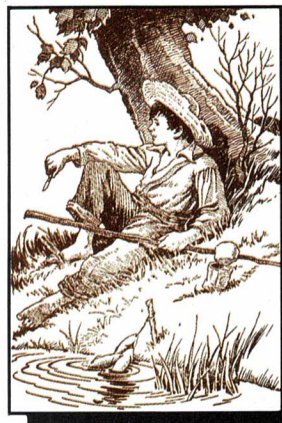
Huck Finn's RIVER Rolls On

The Mississippi has undergone some dramatic changes in the hundred years since Mark Twain wrote his novel

By Russ Rymer

JUST BEFORE DAWN, somewhere south of Memphis, the old passed the new on the Mississippi River. The deckhands of the *Penny Eckstein* — a towboat pushing 25 grain barges south from Illinois to New Orleans — had just assembled for breakfast in the small room next to the galley. The smell of biscuits and gravy mingled in the air with the odor of diesel oil and the dank smell of the river. The men talked about who was due a spell of shore leave and who was responsible for what on deck that day until "Rooster," the first mate, spotted something through the window.

"It's the *Queen*," he cried. The crewmen crowded outside onto the narrow deck and looked out over the water at a towering apparition of colored lights and tiers of carved wooded gingerbread floating majestically by on the



Penny Eckstein's port side. It soon left them behind and all they could see were the red paddles churning up its wake. It was "the *Queen*," all right, the *Delta Queen* — one of the last of the sternwheelers that had once ruled the river.

The *Penny Eckstein* and the *Delta Queen* represent much that has changed on the Mississippi. Surely one is heir to

the other — tugs like the *Eckstein* have brought commerce back to the Mississippi on a scale it hasn't seen since the War Between the States ended the era of paddle wheelers more than a century ago. In effect, the *Eckstein's* captain, Jim Wilkinson, and its relief captain, Terry Boyles, are the modern descendants of Samuel Clemens who, before assuming his career as writer Mark Twain, piloted riverboats over this same stretch of water. But the river that Wilkinson and Boyles know so well is different from the one Twain described in *The Adventures of Huckleberry Finn*.

In the hundred years since the publication of that epic river adventure, the Mississippi has been dammed, channeled, polluted and populated. Its current has been contained with levees and restrained with locks, and in some areas

Symbol of another era, a paddle wheeler wends its way up the Mississippi, along the same route that Samuel Clemens followed when he piloted a similar boat more than a century ago. Today, the river is contained with levees and locks, and barges dominate the water.

NATHAN BENN (WOODFIN CAMP); ART BY HENRY MUHEIM FROM ADVENTURES OF HUCKLEBERRY FINN, SAFFIELD PUBLISHING COMPANY, 1941; BUFFALO AND ERIE COUNTY PUBLIC LIBRARY

does not even flow along the same course it once did. Yet, just as when Mark Twain piloted its waters and Huck Finn and runaway slave Jim escaped on its current, the Mississippi River remains a broad indicator of the health of the nation's heartland: our economic condition is reflected in the commerce that plies its length, and our ecological condition is reflected in its vitality.

"The Mississippi has been 'managed' for many years and the result has been



"It was kind of solemn, drifting down the big still river, laying on our backs looking up at the stars..."

FROM *Huckleberry Finn*

damn tough on wildlife," observes Lynn Greenwalt, National Wildlife Federation vice president for resources conservation and former director of the U.S. Fish and Wildlife Service. "It isn't getting any better. The more we attempt to control the flow of the river with locks and levees, the more wildlife habitat is degraded. And though some of the river's pollution problems have been dealt with, there are still many subtle and dangerous problems to solve in the years ahead."

Huck Finn called it a "monstrous big river," and it is. From the tip of its longest tributary to its effluence into the Gulf of Mexico, it flows some 3,700 miles, draining all or part of 28 states and two Canadian provinces.

In character, the Mississippi is really three rivers. Its first 500 miles are quiet ones: it flows out of Lake Itasca in northern Minnesota into a region of marshes and ponds, wild rice and loons. It is not until it reaches St. Anthony's Falls in Minneapolis, that the river displays the first sign of its majesty. From there to Cairo, Illinois—in what rivermen refer to as the "upper river"—it flows between high bluffs, its current interrupted by hundreds of islands. In the "lower river," below Cairo, things change again—the bluffs disappear, the landscape becomes lower, and the river becomes wider, more deliberate and grand in its meandering progress to the Gulf of Mexico.

Today, the river—both upper and lower—is primarily the province of the towboat. The *Penny Eckstein* is typical of many of these barge-pushing craft. Forty-five feet wide and 135 feet long, she is small compared to the grandiose paddle wheelers of the last century, and far less romantic in conception. But she is much better equipped. Twin diesel engines turn out 6,140 horsepower (and burn more than 6,000 gallons of fuel a day). The air-conditioned wheelhouse is equipped with dual radars and sonar depth finders, and the river is now marked with buoys.

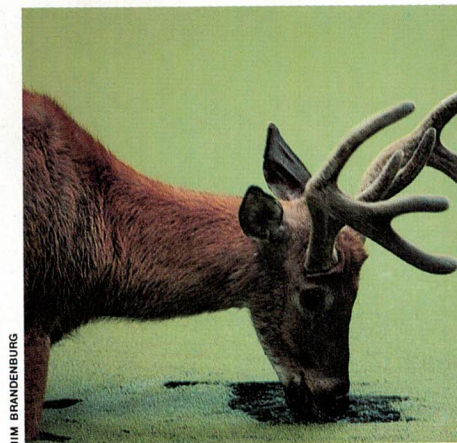
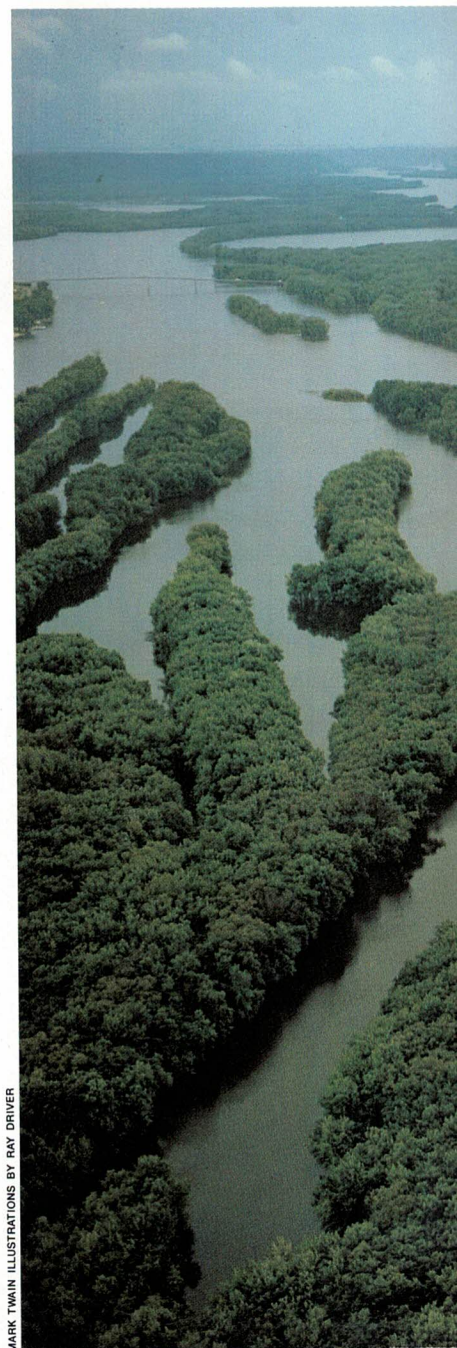
Despite all of this, boatmen must still know the river on intimate terms. "The Mississippi River, it's constantly changing," explained Captain Boyles, standing between the twin rudder sticks and peering out of the fifth-story wheelhouse windows at the *Eckstein's* moving island of barges.

The *Penny Eckstein* was headed south from St. Louis to New Orleans, over the same stretch of river that Mark Twain was licensed to pilot, and along approximately the same route that Huck Finn drifted on his raft. "Buoys that were good at one time may not be good later," Boyles continued. "Everything on the river's liable to change."

And a lot of it has. If Huck Finn were to begin his river adventure over again today, he would notice the difference right from the start, even before he left his home in the fictional town of St. Petersburg. St. Petersburg was, of course, patterned after Hannibal, Missouri, the town where Samuel Langhorne Clemens spent his boyhood. Undoubtedly, Huck would recognize the old town itself if he were to return. Twain's home still stands, a small, erect, white frame house beside a high, board fence—the same fence that Tom Sawyer tricked his peers into painting one distant Saturday morning.

But other things have changed. "The river is not as much a part of this town's consciousness as it once was," says Henry Sweets, curator of the Mark Twain Museum, next door to the Clemens home. His curtained office windows

Dotted by islands (above), portions of the upper Mississippi still provide good habitat for white-tailed deer, bald eagles, red-eared turtles and other animals. But to the south, much of the river's habitat has been altered.



look across Main Street at the broad Mississippi, moving implacably southward, glinting in the sunlight. It is the same view Twain grew up with, only now it is partially obstructed by a set of railroad tracks and the high straight silos of a grain elevator.



"Mississippi steamboating was born about 1812; at the end of thirty years, it had grown to mighty proportions, and in less than thirty more it was dead!"

FROM *Life on the Mississippi*

tobacco and manufactured cigars, corn, wheat, barrel flour and concrete. (Hannibal's concrete plant was once the world's largest; it produced most of the concrete used in the building of the Panama Canal, all of it shipped down the Mississippi on boats.)

Barges still stop in town, at the concrete plant or at the grain elevators, but they hardly provide the activity of the steamboat era. "The Civil War changed things here," notes Sweets. "Afterwards the railroads took over, and the steamboats declined." The industrial revolution had reached the river valley on iron tracks, decimating river shipping until increased use of towboats and barges in this century revived it.

Mark Twain was no more enamored of towboats than he was of railroads. "... so straightaway some genius from the Atlantic coast introduced the plan of towing a dozen steamer cargoes down to New Orleans [with] a vulgar little

"In Mark Twain's day, the whole town only extended seven blocks from the waterfront," says Sweets. "Today, most people live further out. When the river starts rising in the spring, there's a lot of talk about it. But otherwise, it's just there; it goes about its business but it doesn't affect our daily lives."

Mark Twain could hardly imagine such. In his day, the Mississippi was the thread linking any river town with the rest of the world. In the late 1840s when he was a young boy, more than a thousand steamboats a year docked in Hannibal to load on hogs and cattle, hemp, leaf

tugboat," he wrote in *Life on the Mississippi*. "And behold, in the twinkling of an eye, as it were, the association and the noble science of piloting were things of the dead and pathetic past." Indeed the new regime would have been immediately apparent to Huck Finn as he floated in his canoe to Jackson's Island, across from Hannibal, at the inception of his journey.

"The river looked miles and miles



Not far from Samuel Clemens' boyhood home in Missouri, 70-year-old Harvey Hatfield hauls his catch in a hoop net (above). In recent years, Mississippi fish harvests have declined as pollution has spread through parts of the river.

At Alton, Illinois, a towboat pushes its load of barges through one of the 26 lock-and-dam structures built to control the Mississippi's flow (right).

across," said Huck. "The moon was so bright I could a counted the drift logs that went a-slipping along, black and still, hundreds of yards out from shore. I rose up, and there was Jackson's Island, about two mile and a half downstream, heavy-timbered and standing up out of the middle of the river, big and dark like a steamboat without any lights."

Approaching Jackson's Island like that today, the youngster might have thought he'd hit a steamboat — for its shores are often lined with the sheer steel hulls of empty barges.

Barges are the new medium of river commerce, and the modern river is tailored to fit them. A barge, loaded, draws about eight-and-a-half feet, so the Mississippi is maintained at a depth of nine feet, even in its upper reaches where it used to get shallow enough in some places to wade across. Ensuring this nine-foot channel all the way north to St. Paul is no easy task. It requires an ongoing altering of the river's geography and flow with the use of dams and dredges.

When Huck and Jim set out from Jackson's Island 100 years ago and headed south, they faced no man-made obstacles except those that floated. No longer. Today they would not get far below Hannibal before they hit a brightly lit barrier of concrete and steel stretching all the way from Missouri to Illinois: a lock and dam, one of 26 such structures built and maintained by the Army Corps of Engineers on the upper Mississippi. The dams impound enough water to provide ample depth for the barge traffic, and the locks allow the barge tows to be admitted through the dams from one level of the river to another. It is an expensive process with taxpayers footing the entire bill. "We've tamed the river for commerce and agriculture, and now there's no turning back," observes Lynn Greenwalt. "We've got the monster by the tail and can never let it loose."

The southernmost lock is just downstream from the Mississippi's confluence with the Illinois River. The Illinois drains the Chicago area, and for years it was so polluted that barge crewmen hated to work on it. Industrial growth and burgeoning population throughout the Mississippi River Valley, especially in the 1950s and 1960s, contributed to the river's pollution problems.

But the problems have been longstanding. The once thriving commercial fishing operations and the freshwater mussel industry that produced mother-of-pearl buttons, have both collapsed, victims, in part, to the pollution that killed their resource. The pollutants are not just industrial; over the years, barge spills have contributed heavily to the river's contamination. In addition, the Missouri River, which flows into the Mississippi just north of St. Louis, carries a burden of fertilizers and pesticides from the grain belt.

It also brings mud. Every tumblerful of Missouri River water, reported Mark



Twain, "holds an acre of land in solution." He was exaggerating, but it's true that the Missouri is the source of much of the Big Muddy's mud. As it flows through the western plains region, it carries off much of the land it drains.

The lower Mississippi, though, also contributes to the soil runoff problem.



"The Mississippi is a just and equitable river; it never tumbles one man's farm overboard without building a new farm just like it for that man's neighbor. That keeps down hard feelings."

FROM *Life on the Mississippi*

As the grand river gains in size and power, its meanders spread out into great serpentine loops across the countryside. Often, as the water cuts into the land, these loops change shape or change course, moulding their banks to fit their new configurations.

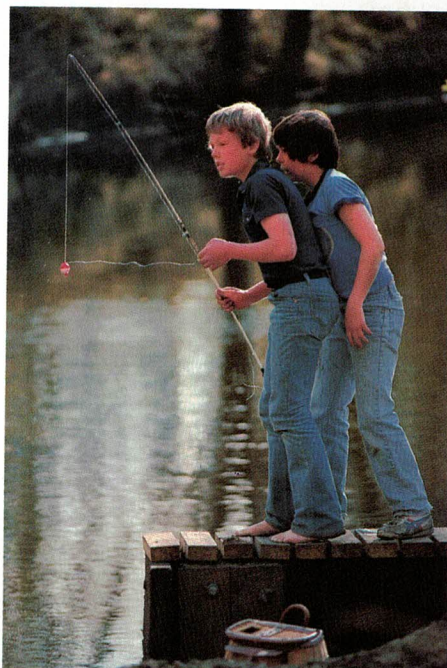
Passing one Arkansas town, Huck marvelled: "On the river front some of the houses was sticking out over the bank, and they was bowed and bent, and about ready to tumble in. The people had moved out of them. The bank was caved away under one corner of some others, and that corner was hanging over. People lived in

them yet, but it was dangerous, because sometimes a strip of land as wide as a house caves in at a time. Sometimes a belt of land a quarter of a mile deep will start in and cave along and cave along till it all caves into the river in one summer. Such a town as that has to be always moving back, and back, and back, because the river's always gnawing at it."

Today, flood control is a major concern on the lower Mississippi. A disastrous flood in 1927 fueled an impetus to construct some kind of safeguard against the ravages of the unruly river. The answer was a system of levees — high embankments set back as much as a mile from the riverbank. While the levees were built to restrain the overflow, the banks of the river were stabilized from further erosion by concrete mattresses. Thus for long stretches, the

banks of the modern Mississippi are about as natural as a driveway apron.

Perhaps more than anything else, the levee system has altered life on the Mississippi for its oldest residents: the wildlife that inhabits its shores. Muskrat, deer, nutria, otter and other mammals, turtles and snakes, and birds ranging from cranes to ducks live in the alluvial habitat that borders the river. In Mark Twain's day, this habitat was continu-



Heirs to Huckleberry Finn's domain, two youngsters prepare to cast out from a Mississippi dock (above). As in Twain's day, the river remains a broad indicator of the health of the nation's heartland.

A male blue-winged teal pauses along the river's edge (right). As their lower Mississippi habitat has dwindled, many birds have had to change their migratory habits. They no longer fly as far south.

ally nourished and replenished by the soil and nutrients that washed down from the upper stretches of the river. But as the river has become tamed, the wildlife habitat has lost much of its regenerative power. No longer does the soil-rich water rise over its banks every year to flood hundreds of thousands of acres, leaving behind its carpet of new loam. Instead, the Mississippi's load of sediment now washes into the Gulf. Many of the bottomland hardwood regions of the lower river have been drained and replaced with cultivated

fields. "We've paid a very high price to create those croplands," notes Greenwalt. "We can never replace all of the wetlands that have been drained."

Birds may be the most affected. An estimated eight million ducks, geese and swans winter on the river. As the southern regions are guarded from floods by levees and the water levels of northern regions are raised by dams, the birds are changing their flight plans. "The tire river is shot through with problems for waterfowl," adds Greenwalt. "The greatest effect is on the migratory birds which don't go as far south as they used to. Now they stay in the Midwest."

Despite its success in some areas, the levee system cannot completely control the Mississippi's exuberance. The river still climbs out of its banks on occasion, and, in at least one place, threatens to do so permanently. South of Natchez, the levee is the only thing preventing the Mississippi from taking a complete new course to the sea, via the Atchafalaya River. Experts fear that unless the levee that separates the rivers is sufficiently shored up, the Mississippi will overrun the barrier and bypass New Orleans and Baton Rouge entirely.

That would certainly confound engineers who thought the mighty Mississippi had been brought to heel by twentieth century progress. But it wouldn't fool the men on the *Penny Eckstein*, or anyone else who works the river. As in Huck Finn's day, they are the people who witness the Mississippi's changes on a day-by-day basis.

"All I really know is the river," says Terry Boyles as he fine tuned the progress of the *Penny Eckstein's* barograph past Greenville, Mississippi. "The whole time I'm out here I don't keep my eyes with the news. I just keep an eye out to learn the Mississippi."

He's learned from a master. Next to the honey-colored screen of the river was a small, dog-eared paperback book. Annotations were scribbled in by a ballpoint pen over the print on its yellowed pages — headings like "snags and driftwood," "lazy leadsmen," "reading the water," and "Hat Island crossing." The book was Mark Twain's *Life on the Mississippi*, a copy of which had been given to Boyles as a textbook by the pilot who trained him on the river.

Senior Editor Russ Rymer traveled down the Mississippi last year with the crew of the *Penny Eckstein*.



The CROC Holds Its Own

BY DAY, the twisting maze of tidal creeks and dense mangrove forests that make up the southern Everglades seems like it could be a million miles from civilization. After sunset, however, the geographic realities of South Florida become more apparent. At night, the lights of Miami and its sprawling suburbs blaze so brightly that they sometimes dim the stars over such back-country haunts as Black Betsy Key, Joe Bay, Mud Creek and the other, often unnamed, wildlife retreats.

During the steamy nights of late July, it is in this unlikely light—under the twinkle of distant stars and the glow of not-so-distant neon—that one of the country's rarest reptiles renews itself.

Lying with her toothy snout pressed against a mound of mud, the adult female American crocodile senses apparently the first stirrings of life in her nest. At the sound of the young struggling to emerge from their three-inch eggs, she claws open the nest, then delicately carries her hatchlings in her jaws to the water's edge.

As many as 40 khaki-colored crocodiles may hatch from a single clutch of eggs. Their entry into the world coincides with South Florida's rainy season. Born into a saltwater environment that could quickly kill them, they will avoid dehydration for the next few months by drinking the lenses of rainwater that float on top of the salty bay—or, as Pennsylvania State University biologist Frank Mazzotti discovered, by snapping up raindrops as they fall. Fewer than half the young crocodiles will escape the predations of hungry herons and other predators and make it through the first year of life. Only a handful will survive to become adults.

Until recently, most wildlife experts believed that the twin pressures of predation and encroaching civilization spelled doom for the creature in the United States. Now, after years of care-

ful study, crocodile experts admit, happily, that they were wrong.

A decade ago, authorities thought that the number of American crocodiles was rapidly declining—with a total population as low as 200, and perhaps no more than a dozen breeding females left in the country. The situation looked so grim that the National Park Service tried, unsuccessfully, to artificially incubate crocodile eggs. It also considered a plan to eliminate the raccoons that sometimes prey on the eggs.

Now, a comprehensive five-year survey in Everglades National Park—which included everything from airborne radio-tracking of the animals to nighttime canoe trips to count glowing crocodile eyes—suggests that the crocodiles' numbers have been stable, perhaps have even increased slightly, since the species was officially declared endangered in 1975.

Biologists say that, although the numbers fluctuate, there may now be as many as 560 American crocodiles in the mangrove-fringed estuaries of South Florida. They say that the population was probably never as low as they once thought. "The crocodile is not on the verge of extirpation in the United States," says James A. Kushlan, the East Texas State University biologist who directed the study. "The species is still considered endangered, but there is no evidence which shows any decline in its numbers.

"It's incredible," the scientist points out, "to see an animal like this holding its own so close to two-and-a-half million people. We should all be encouraged that endangered wildlife and a large population center like South Florida can coexist."

One of the most remarkable examples of that coexistence is at a place called Turkey Point, where increasing numbers of crocodiles now not only live, but breed successfully, in the cooling canals of a major nuclear power plant. Because

*In southern Florida,
the endangered
reptile is surviving
in some unusual
haunts*

By Mike Toner

A decade ago, most experts believed that American crocodiles like this menacing creature (opposite) were on the verge of extinction in this country. Today, however, a new study shows that the reptiles' numbers are holding steady in their Florida range.



Out on a limb, two young crocodiles face an uncertain future. Fewer than half of the youngsters escape predation and make it through their first year. Only a handful of them become adults.

the site for the plant was carved from the red mangrove forest bordering southern Biscayne Bay, no one was particularly surprised when an occasional crocodile turned up in the 168-mile network of canals that dissipate the heat from the plant's powerful condensers. But when workers saw an osprey snatch an infant crocodile from a cooling canal one day in 1976, Florida Power and Light Company officials decided that they might have more than just casual visitors on their hands.

Active breeding by an endangered species could have blocked the utility's plans to expand in the area, and thus company authorities were not particularly happy to discover two crocodile nests along the canal banks in the late 1970s. In the years since, however, relations between the utility and its uninvited tenants have reached a comfortable equilibrium. "We've developed a good feel for where the animals are and how they behave," notes J. Ross Wilcox, the company's chief ecologist.

More than 20 adults and subadults now live in and around the cooling canals. And the population, which now includes about ten percent of the crocodiles living throughout all of South Florida, is growing. At least 31 crocodiles hatched from nests in the plant's cooling system last year.

Because the public is excluded from the 168-mile network of canals, the reptiles have a degree of privacy and protection denied them in most of South Florida's shrinking wilderness. And having shelved its expansion plans for economic reasons, the power company now displays an almost paternal affection for its charges. It has spent \$400,000 on crocodile research in the last six years, and in the process found a public relations windfall.

"The crocodiles have all of the necessary requirements to survive in what is entirely an altered environment," says Wilcox. "They are basically shy, secretive animals. They can't tolerate a lot of disturbance. I think that's why they like it here."

Although there are a dozen species of crocodiles that range throughout the



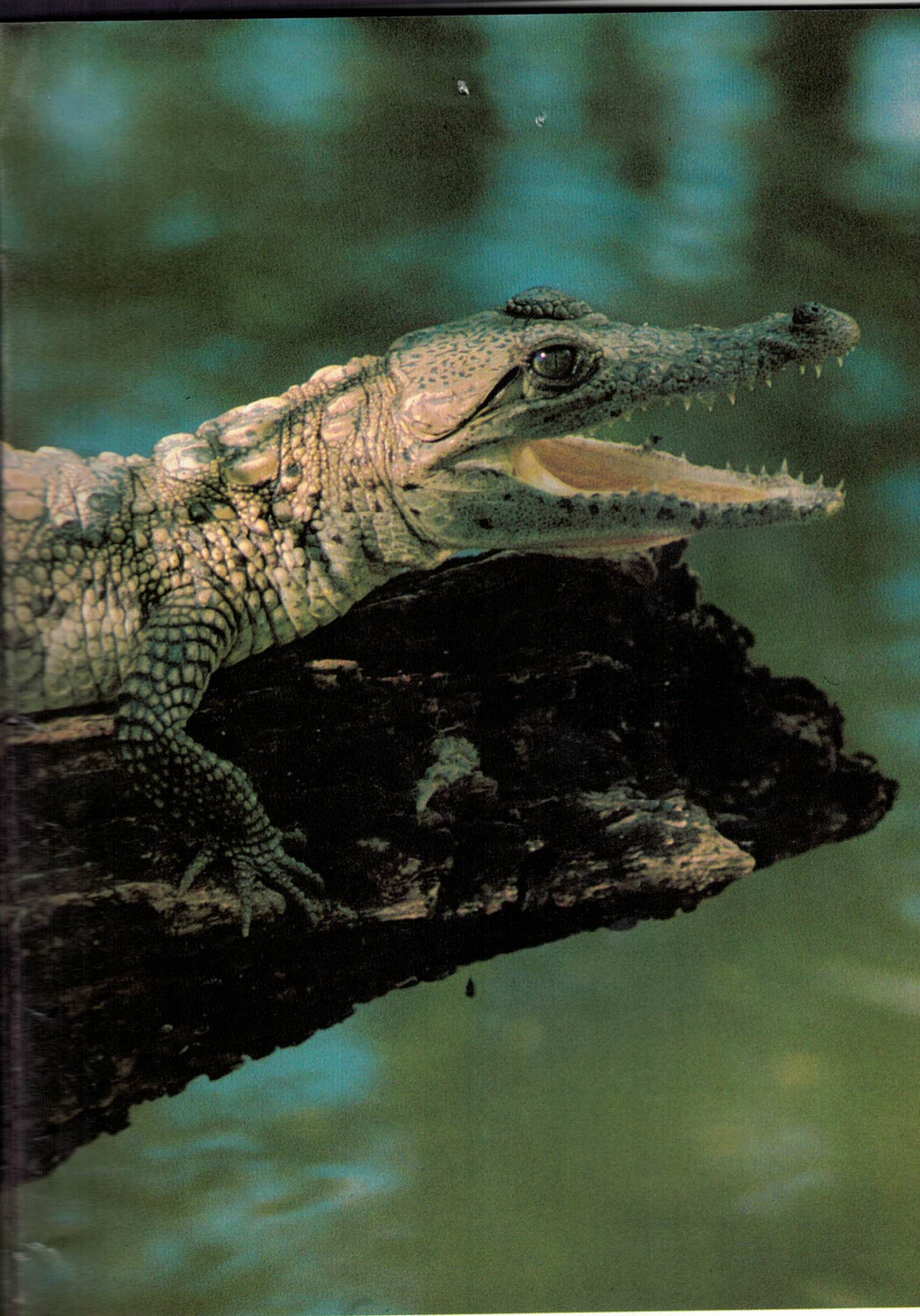
world, the subspecies found in the United States was scientifically unknown until 1869. The animal's elusive nature had long kept scientists and the public from understanding its special needs. The research that was completed last year by Kushlan and Frank Mazzotti provided the most detailed picture yet of the American crocodile's behavior in Florida.

To the untrained eye, the crocodile is virtually indistinguishable from its slightly smaller and more numerous cousin, the alligator. A 12-foot, 500-pound adult reptile does not invite close inspection, but a careful look reveals

that the crocodile's snout is slender, more tapered than that of an alligator. The protruding fourth tooth on each side of the lower jaw also gives the animal a characteristic "grin."

American crocodiles, as a species, are much less aggressive than their cousin, the alligator. Alligators often venture into South Florida's suburbs, turning up at odd moments in driveways and swimming pools. They may prey on dogs and cats and, on rare occasions, have been known to attack humans.

Crocodiles, on the other hand, typically shun human activity. In five years of study, biologists were only able



never substantially bigger than it is today, and the animals never ranged much beyond coastal areas of South Florida and the Keys. During the last 50 years, however, as crocodile country slowly gave way to millionaires' mansions, the reptile was pushed south. Then, when a rush of new development swept over the Florida Keys in the 1970s, the creature was again pushed north. The animal's retreat, fortunately, was always toward the core of its original range: the coves and tidal creeks found throughout the southern Everglades.

Even there, it is not immune to outside pressures. Because it often nests along the banks of small streams flowing out of the Everglades, the nests are vulnerable to rising water, which can flood the nest and kill the embryonic crocodiles in their eggs. Currently, Florida officials are planning to divert more water into these streams to repair some of the damage caused by over-drainage of the Everglades during the 1940s and 1950s—a plan that could eventually create a whole new set of problems for the crocodiles.

At present, the U.S. Fish and Wildlife Service is at work on a project that may keep the crocodile from being totally dependent on the Everglades for its survival. Six years ago, spurred by the accelerating development in the area, Congress created the Crocodile Lake National Wildlife Refuge in the northern Keys. It authorized the purchase of land from local developers to create a new zone of protection for the reptile. Today, after being delayed by administration budget restraints and legal complications in appraising the land, the acquisition of land for the refuge is finally nearing completion. This year, the Fish and Wildlife Service plans to spend \$9.9 million to add 4,000 acres of land to the 3,000 acres it already owns.

Crocodile habitat lost to development, of course, cannot be replaced. But with two separate enclaves, Kushlan believes that the species now has a brighter future than at any time since the turn of the century. "We cannot put things back the way they were in 1900," he says, "but it's encouraging to realize that the crocodile's core range is still intact. And we are now confident that in those areas the creature is probably doing about as well as it ever did." ■

recapture ten percent of the tagged crocodiles. Once disturbed, a female will relocate her nest rather than risk further intrusion.

Crocodiles are less tolerant of the cold, too. Alligators range as far north as the Carolinas and west to Texas, where freezing temperatures are common during the winter months.

Crocodiles, however, are severely limited in their range by temperatures—a handicap that, until Mazzotti completed his study, had perpetuated the myth that it is a saltwater species. "The reason that its range is confined primarily to the coastal areas of South

Florida is temperature, not a preference for salinity," says Kushlan. "The crocodile is a tropical animal that is barely making it in the United States. At temperatures below 60 degrees F., the animals become lethargic."

American crocodiles are also found in parts of Cuba, Jamaica, the Dominican Republic and Central America. But the genetic characteristics of North American crocodiles show that the Florida subspecies has been completely isolated from its Caribbean relatives for at least 60,000 years.

In the United States, notes Kushlan, the crocodile population was probably

JEFF FOOT (BRUCE COLEMAN INC)

Mike Toner is science editor of The Atlanta Journal and Constitution.



President Reagan talks with Editor John Strohm in the Oval Office.

Exclusive Interview

President Reagan Gives His Views on Wide-Ranging Conservation Issues

In an exclusive interview with *National Wildlife* magazine, President Ronald Reagan answered some far ranging questions from Editor John Strohm.

The questions were submitted in advance to the President, who asked his staff to research his answers. After making some changes, he gave final approval. Meanwhile, Strohm met with the President in the Oval Office to discuss some of the questions and to talk about the wildlife on the President's California ranch. Following is a complete report of Strohm's questions, and the President's answers.

Wildlife: *You've often spoken eloquently of the "shining city on a hill"*

when talking about the future you see for America. Isn't clean air and water, better stewardship of the land, a sane energy policy, and safeguarding our precious wildlife resources an essential part of the picture?

Reagan: Absolutely. America's tremendous economic recovery has been achieved while preserving the wildlife, scenic grandeur and other environmental treasures we Americans hold dear.

In fact, these values have been enhanced through such initiatives as the billion dollar park restoration and improvement program, the great surge in private sector contributions of time, land, money and equipment to the parks and wildlife refuge systems, several ex-

citing fishery restoration projects, and the Chesapeake Bay recovery effort—just to name a few.

During my second administration we're going to continue to be good stewards of all these priceless resources.

Wildlife: *Of all the major environmental problems facing us in this country today, which do you consider the most pressing? And how will your administration address the issue?*

Reagan: Well, there are several—and we are addressing each of them. Certainly we are going to keep working on identifying and cleaning up toxic waste sites. Of equal importance is implementing the recently enacted changes

the Resource Conservation and Recovery Act, which regulates currently operating toxic waste disposal sites. A strong RCRA program is insurance against the mistakes that led to the need for the Superfund.

We also must continue our aggressive effort to identify the factors that contribute to acid deposition so that we can determine whether our existing air pollution controls are sufficient.

Wildlife: *Of the thousands of toxic dumps listed by the EPA as dangerous, only a handful are being cleaned up, in spite of Superfund. Both Bill Ruckelshaus, former EPA Administrator, and Lee Thomas, your present Administrator, feel much more money is going to be needed. Will you support a \$10 billion fund in order to get the job done faster and help people feel safer?*

Reagan: First of all, it's not true that only a handful of the toxic dumps are being cleaned up. Work has been done at hundreds of sites, including emergency cleanup and engineering studies. Keep in mind that each site is different, and with groundwater or deep soil contamination, you can't just bring in a bulldozer and be done with it. Some sites will take years to clean up.

When we took office the Superfund had just been authorized. We had to start from scratch on a problem that had been ignored for decades. Our cleanup record is a good one, and we'll keep moving ahead on this.

In my last two State of the Union Addresses, I committed our administration to support Superfund reauthorization. On February 22, I sent to the Congress proposed legislation to keep that commitment. The bill would more than triple the size of the Superfund program—from \$1.6 billion to \$5.3 billion over the next five years. The EPA has estimated that it cannot prudently spend more than \$1 billion per year, so our proposal sets the best funding level for getting the job done.

In addition to the expansion of Superfund, we have asked for increased enforcement authority to make responsible parties either do the cleanup or pay for it. We also want a larger role for affected citizens and the states, and expanded authority to respond to emergencies.

There's no doubt we have to move forward aggressively to eliminate the dangers caused by years of past waste

disposal practices. It takes time, but we're getting it done.

I have instructed EPA Administrator Lee Thomas to make reauthorization of the Superfund his highest priority.

Wildlife: *Many of your administration's environmental policies seem directed toward changing the role of the Federal government. What do you believe is the appropriate role of the government in environmental protection?*

Reagan: I believe one of the most important responsibilities of government is protection of the environment—air, water, wildlife, parks and so forth. But let's remember that in our country there

“The open lands, the wild lands, are an important part of our heritage, and I think every American should have the opportunity to experience that.”

are several levels of government. What we have tried to do is restore the partnership of the Federal government with the states in protecting the environment.

Some of these protections require Federal leadership because, if a problem is not dealt with adequately in one state, the problem “flows,” so to speak, into neighboring states.

But there are many environmental and resource protection measures that are better and more effectively handled by states or localities.

We have been trying to restore the principle that the Federal government should take the lead in environmental protection and managing natural resources where the national interest is involved, and that the states and localities should shoulder the responsibilities where they can and should be doing the job.

That Federalist principle is a sound one and a very American one. Overly restrictive, overly costly and inappropriate Federal regulations too often have done more harm than good.

Wildlife: *If states are given the responsibility for setting environmental stan-*

dards, isn't there a possibility that many will enter into competition for new or relocated industry by reducing stringent environmental controls?

Reagan: That is a legitimate concern in some cases. We support and are enforcing the laws that require states to establish and police environmental standards.

For example, surface mining regulation is one instance where Congress says the states must meet certain standards, and the Federal government must intervene if they don't. We have intervened—we've taken over two state programs—when they failed to live up to the standards established under the Federal strip mining law.

But we think in most instances the states should enforce environmental protection programs, and should have reasonable flexibility to tailor regulations to adjust to the situations within each individual state.

Wildlife: *The Endangered Species Act requires that the habitat needs of certain troubled species take precedence over Federally authorized development. Do you believe that water development projects, as one example, should be modified or even cancelled when necessary to protect the habitat of an endangered species?*

Reagan: As you know, the Endangered Species Act provides for Federal activities to be carried out so that endangered species are not jeopardized. Under the conditions you state in your question—where it is the only alternative to protect an endangered species—modification of the project or, if necessary, cancellation may be appropriate.

As you also know, the act as amended does provide for Congressional consideration of waivers in cases of unresolvable conflict. This provision has been little used. When it has, satisfactory alternatives have usually been found to protect endangered species and let the project go through. We believe that sound planning and active public involvement can minimize conflicts and, in most cases, resolve them.

Wildlife: *When you go to Canada next week to meet with Prime Minister Mulroney, the number one topic may be acid rain. What will you say when he asks what Uncle Sam is going to do?*

Reagan: What many people do not realize is that the United States leads the

world in air pollution control. Since 1973, the U.S. has reduced sulphur dioxide by 26%. New automobiles are equipped with pollution controls that almost eliminate emissions of hydrocarbon and carbon monoxide. As a people, we have spent over \$150 billion in higher fuel costs and electric power rates to achieve these reductions.

This year, I have asked Congress for a 33% increase in funds, \$88 million, to conduct research on the causes of acid rain and ways which its damage may be corrected.

Independent of acid rain controls, the EPA has proposed new regulations which will reduce the suspected pollutants. These include new controls for tall stacks at utility plants and reductions in lead added to gasoline. Uncle Sam has been doing his part to make our common environment better.

Wildlife: *Mr. President, your ranch and your visits there provide for you a respite from the tough job in the White House. Our readers would be interested in how you manage your ranch and what you enjoy most about the land and wildlife. Do you attempt or manage the land for any particular wildlife?*

Reagan: I'm not at the ranch as much as I'd like — and never for more than a few days at a time. So I'm not able to run cattle there or actively manage it at all, anymore. But Nancy and I maintain the ranch as open land and we enjoy seeing the hawks, the blacktailed deer, the raccoons and possums, and the other animals that live there.

I think it's important for us to keep open lands in the United States. There's something about the wide open spaces that gives you a real feeling of freedom, and I think the pioneers who settled the West felt that. That's one of the things I enjoy most about the ranch. It brings me back to a sense of history, of remembering where we came from, how our country grew, and what kind of people made it. The open lands, the wild lands, are an important part of our heritage, and I think every American should have the opportunity to experience that.

Wildlife: *About 50 years ago, another President convened a White House conference to address fish and wildlife protection issues. Out of that grew the National Wildlife Federation. Now half a century later, how do you feel about the possibility of calling another White*

House conference to address conservation and environmental issues?

Reagan: Well, a lot of good came out of that first North American Wildlife Conference called by President Roosevelt in 1936. Not only did it foster the birth of the General Wildlife Federation, which later became the National Wildlife Federation, but it set in motion the annual

“Recommendations coming out of the Council (NWF's Corporate Conservation Council) will get a fair hearing in this White House.”

series of North American conferences as a way for professionals in the fields of fish and wildlife and natural resource management to meet and discuss current issues and directions.

Regarding the origins of Presidential involvement in the progress of natural resource management in this country, I think you can look back even further, when another Roosevelt, Theodore, established the tradition of involvement with the natural resources community. I'd like to help carry on that tradition.

Wildlife: *The present problems of the deficit have focused attention upon wasteful programs and government subsidies. Should the Federal government continue to hold sales of public timber that lose money and charge ranchers less than the market rate for grazing livestock on public lands?*

Reagan: First, let me answer your question about grazing fees. This is a topic that Congress will be addressing soon. As you know, Congress established a formula for determining fair market value for grazing livestock on public lands and directed that the formula be used and studied on a 7-year trial basis. We are nearing the end of that test period and will be making recommendations to the Congress in the near future. I'm not ready yet to say what our recommendations will be, but I think it is important that the public receive a reasonable return for use of the public resources.

With regard to public timber sales,

this is an important revenue source and is the economic livelihood of many of our small towns and communities. Our budget for this year proposes that we change the calculation of receipt sharing to reflect the annual costs of sales which will probably discourage sales that lose money. There are many things that must be considered in deciding whether or not to harvest. Cost is one that has to be weighed heavily in the decision process.

Wildlife: *You have signed legislation creating more Wilderness areas than any other President. There are those who argue that we have now established enough. Others hold that we need to protect additional Wilderness. What is your position?*

Reagan: America is blessed with abundant land, water and wildlife resources that provide excellent opportunities to our citizens for outdoor activities. We are fortunate that our predecessors in this government had the foresight to establish great national parks, Wilderness, and wildlife refuges to protect the best of these national treasures.

Protection of the nation's park, wilderness and wildlife resources has been and continues to be a high priority of this administration. It is a goal I stressed to Secretary Hodel when I nominated him to be Secretary of the Interior.

With regard to the question of whether we have enough Wilderness already, the Congress established a procedure for inventorying and studying our resources to determine their suitability for designation as Wilderness. We continue to study lands to determine which are possess Wilderness characteristics and should be protected and preserved. The system provides for input from all interested parties, with the final designation decision resting with the Congress following recommendations from the Executive Branch.

While there is no absolute answer to your question on how much Wilderness is needed, I think the process established by Congress provides for proper consideration in reaching wise decisions.

Wildlife: *The National Wildlife Federation believes the private sector must take the lead in solving many environmental problems. With this in mind, we have established the Corporate Conser-*

vation Council as a forum in which these issues can be discussed. Would you offer your views on the role you see for the private sector and the value of this kind of exchange?

Reagan: Well, I'm tempted to say, "Welcome to the team!" The National Wildlife Federation isn't alone, by any means, in believing that we need to tap the vast talent and know-how the private sector can offer in dealing with the nation's natural resource issues. I'm for using the broadest array of expertise we can put together to address these matters.

We've *always* believed that this was the way to go, and that government can't do the job alone. That's the motivation behind our private sector initiative effort. We've been trying to open up the avenues by which business and industry can tackle some of these issues that are growing beyond the means of any one organization or government agency to solve.

If your Corporate Conservation Council can support these ventures and provide a forum for ideas on how best to build these sorts of partnerships, it will be doing a real service. I can assure you that any recommendations coming out of the council or any similar body will get a fair hearing in this White House.

We've pioneered a number of private sector projects at the Interior Department. For example, the new National Fish and Wildlife Foundation will help promote even greater private sector involvement in fish and wildlife issues. The Foundation, as you know, is designed to encourage donations of funds and property to support the activities of the U.S. Fish and Wildlife Service.

So we've got the ball rolling, and I welcome the Federation's Corporate Conservation Council to help us keep it going with your ideas, your direction, and your support.

Wildlife: Many studies have concluded that pollution controls actually provide economic benefits through increased employment and business profits. Isn't this a strong argument for pollution cleanup?

Reagan: Let's just say that I don't need that argument to convince me of the need for pollution prevention and pollution cleanup. The strongest *economic* argument for pollution prevention and cleanup is the fact that excessive pollution levies some very heavy costs—costs

in terms of added health care problems, avoidable injury, deterioration of structures and equipment, and harm to tourism and recreation attractions.

Pollution abatement and cleanup do provide opportunities for some new businesses, and more employment. Of course, we also have to recognize they add to the final cost of goods and services. Consumers either pay the higher costs for the U.S.-made goods, or perhaps switch to cheaper imports, adding to our international balance of trade deficit. This same process also can price U.S. goods out of international markets, with the same consequences.

I think the point here is that pollution control has both benefits and costs, and that a wise government learns to weigh both carefully as it protects the public interest.

Wildlife: Mr. President, your ranch and being out-of-doors obviously give you a great sense of well-being for renewal. For the vast majority of Americans, their "ranch" is found in parks, wilderness areas, refuges — public lands. When you head for your ranch, Mr. and Mrs. Joe Citizen pack up the kids and visit parks, go fishing, camping, hiking and backpacking. Would you support investments in parks, natural areas, etc., to protect this outdoor heritage? Many of our readers might wonder if deferral does not mean loss of these lands.

Reagan: Yes, I support investments in parks, natural areas and other portions

“The strongest economic argument for pollution prevention and cleanup is the fact that excessive pollution levies some very heavy costs.”

of our outdoor heritage, and our track record shows it.

From 1981 through 1984, the National Park Service spent over \$365 million to acquire nearly 64,000 acres of new parkland. More than 10,000 acres were acquired by donation or transfer. Another \$66.8 million is available in 1985 for the National Park System.

As you know, we have recommended a three-year moratorium, beginning in 1986, on purchase of new Federal parklands in light of our national need to do something about the budget deficit. But our commitment to protecting our outdoor heritage has not diminished. In fact, even our 1986 budget request includes \$11.3 million for emergency land acquisitions so that truly threatened areas will not be lost. We will continue to seek creative alternatives to Federal purchase, such as land exchanges, donations and easements, until our Federal budget situation allows us once again to buy additional lands.

In addition, as many of your members know, we have just completed — one year ahead of schedule — a historic park restoration and improvement program which provided more than \$1 billion for restoration and improvement of facilities in the National Park System. For too long those parks had been left to deteriorate. Now, they've been cleaned up.

We'll keep working with individuals and businesses to encourage private initiatives to benefit the nation's outdoor heritage. It's a birthright of all Americans.

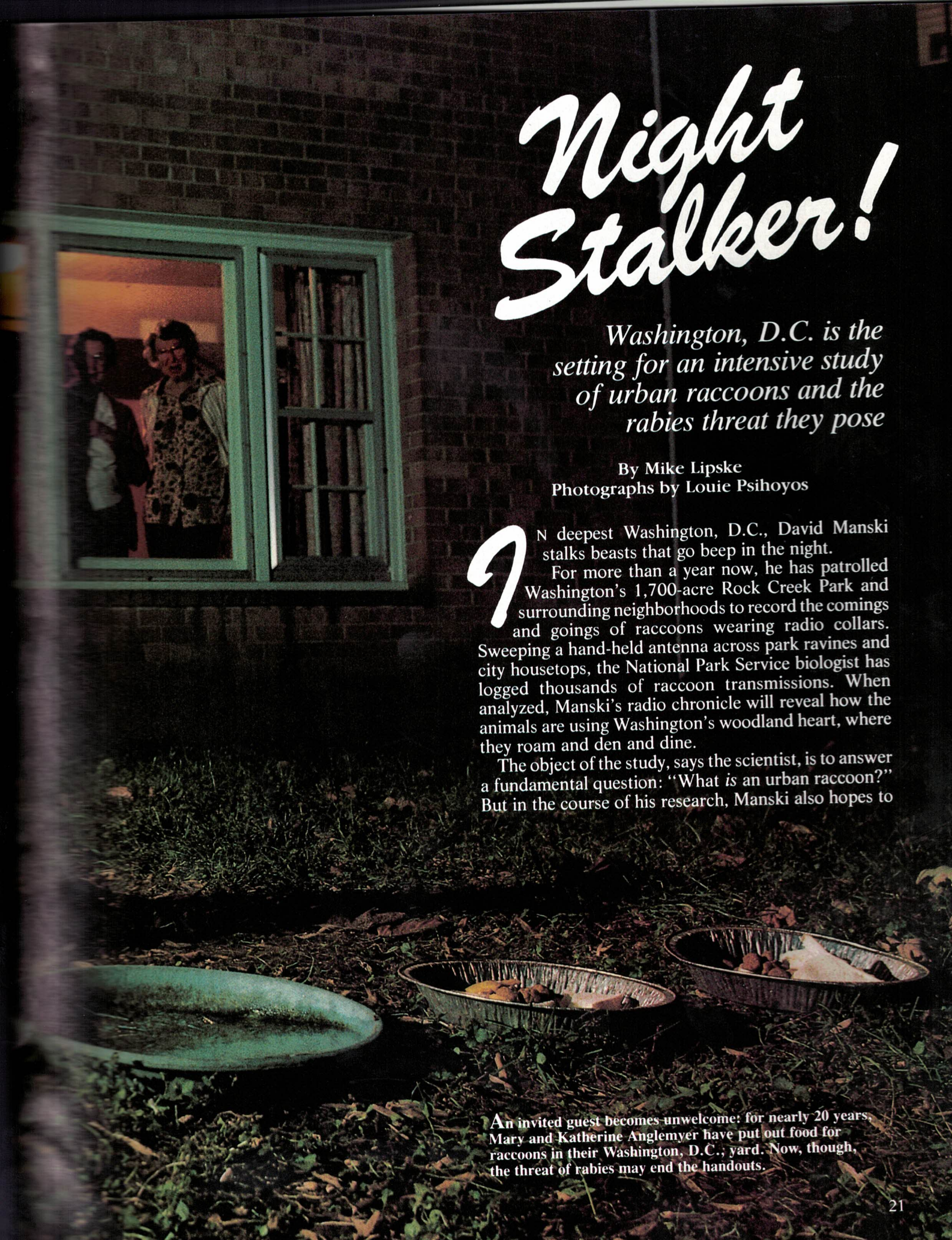
Wildlife: Finally, Mr. President, what would you like to leave as the environmental legacy of your terms in office?

Reagan: Early in this century, President Theodore Roosevelt said that we should treat the natural resources as assets which we must turn over to the next generation increased and not impaired in value.

That's the legacy I want to leave — fewer toxic waste hazards, cleaner air and water, identification of causes and a framework for reduction of acid rain, better maintained and managed national parks, improved protection for wetlands, effective fishery restoration, more recovery programs for endangered species, additional wilderness, and a new spirit of partnership in the stewardship of the land and its resources.

This legacy would include the promise of a future free of international conflict that would bring the ultimate in environmental disaster. And the legacy would include an America that has the economic vitality to maintain and protect the environmental ethic so well stated eight decades ago by Teddy Roosevelt. ■





Night Stalker!

Washington, D.C. is the setting for an intensive study of urban raccoons and the rabies threat they pose

By Mike Lipske

Photographs by Louie Psihoyos

IN deepest Washington, D.C., David Manski stalks beasts that go beep in the night. For more than a year now, he has patrolled Washington's 1,700-acre Rock Creek Park and surrounding neighborhoods to record the comings and goings of raccoons wearing radio collars. Sweeping a hand-held antenna across park ravines and city housetops, the National Park Service biologist has logged thousands of raccoon transmissions. When analyzed, Manski's radio chronicle will reveal how the animals are using Washington's woodland heart, where they roam and den and dine.

The object of the study, says the scientist, is to answer a fundamental question: "What is an urban raccoon?" But in the course of his research, Manski also hopes to

An invited guest becomes unwelcome: for nearly 20 years, Mary and Katherine Anglemeyer have put out food for raccoons in their Washington, D.C., yard. Now, though, the threat of rabies may end the handouts.

learn about another sort of raccoon, one that for many Washingtonians has become a worrisome beast in the night.

During 1983, 1,608 rabid raccoons were located in Washington, Maryland, Virginia, West Virginia and Pennsylvania. Only 42nd in size among the 50 states, Maryland, which borders the city of Washington on three sides, reported 964 rabid raccoons in 1984—a national raccoon-rabies record. The number represented, according to public health authorities, a rapidly expanding epidemic of raccoon rabies in the Mid-Atlantic United States. Those same disease-watchers say that the epidemic, combined with a long-running outbreak of raccoon rabies in the Southeast and a skunk-rabies outbreak in the Midwest, make up the greatest rabies threat to Americans in 30 years.

One of mankind's earliest recognized diseases, rabies is caused by a virus that attacks the central nervous system. Generally spread by the bite of an infected animal, fatal without treatment, its development is prevented in humans with injections of anti-rabies vaccine. All warm-blooded animals are susceptible to rabies. But the disease is more inclined to affect bats and carnivorous mammals, such as skunks, raccoons, foxes, cats and dogs.

As rabies spread through the Mid-Atlantic, worried health officials knew they not only had an epidemic on their hands, but that it was unique. "It's the first time in this country," says Suzanne Jenkins, a veterinary epidemiologist with the government's Centers for Disease Control, "that we're dealing with an urbanized wild animal."

In Maryland, chief state veterinarian Kenneth Crawford thinks the raccoon population has gotten out of hand. "We've provided an abnormally protective environment for them," he says, "giving them an abundance of food in our bird-feeders and our garbage cans." We have also provided a surfeit of cozy attics and chimneys to den in, and a raccoon transportation network to rival anything above ground, what Crawford



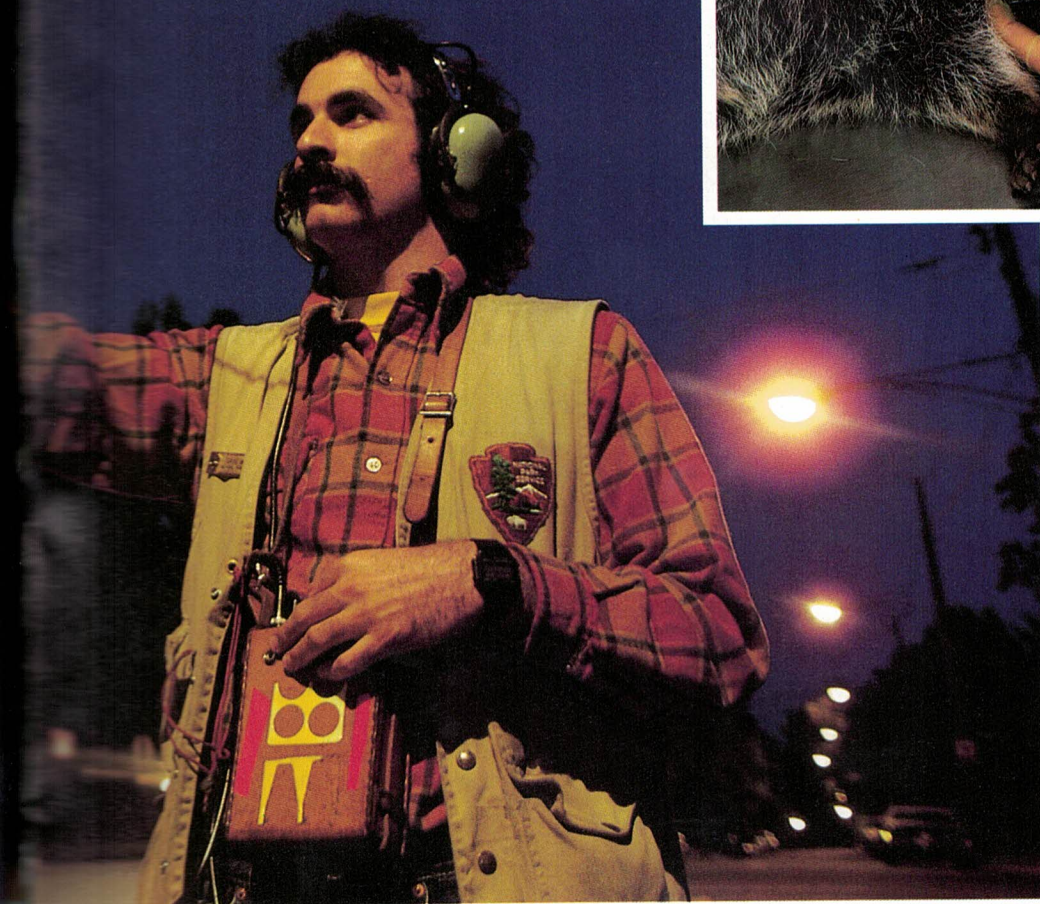
calls "their own autobahns in our sewerlines from one subdivision to another."

People in Washington began to think twice, and twice again, about the raccoon that raided their garbage can or grape arbor. And even Rock Creek Park, the capital's favorite tract of greenery, took on a menacing air.

Rock Creek has been a national park since 1890. A wooded swath stretching from Washington's northern tip south to the National Zoo, it is twice the size of New York's Central Park and twice as wild. Herring migrate in Rock Creek (a

Potomac River tributary), beavers have returned to its shores and there is talk of reintroducing wild turkeys to the woods. Yet, perhaps because Rock Creek is an urban park, there are firmer statistics on the people who use it than about the animals that live there. A few years ago, park managers expressed interest in learning more about the in-town wildlife. "I suggested we use the raccoon as an indicator species," says Manski. "At that time we weren't interested at all in looking at rabies."

A bearded, 31-year-old biologist from Chicago, Manski had experience with



Tracking beasts that go beep in the night, David Manski (center) lifts an antenna to home in on radio-collared raccoons in the nation's capital. From his studies, Manski hopes to learn how the animals adapt so well to cities. Trapped raccoons are anesthetized (far left) and taken to a Park Service lab where they are tested for rabies before being turned loose. After an animal is radio-collared (left), it is released in the same area where it was captured. Each collared raccoon has its own radio frequency.

wildlife on the beaten track. In his time with the Park Service in Washington, he had investigated the dense gray squirrel population in Lafayette Park, a tidy eight-acre square opposite the White House, and attacked a pigeon problem at a Park Service open-air theater, where roosting birds were defecating on patrons in box seats.

To unlock the secrets of the urban raccoon, Manski and his associates are using several approaches. Metal box traps, baited with canned mackerel off the grocery shelf, have been placed along streams and raccoon paths in

Rock Creek Park and in the backyards of city folks who are cooperating in the study. Each time a raccoon is captured, it is anesthetized at a small laboratory within the park and then measured, weighed, sexed, checked for parasites and aged according to tooth wear. Before releasing each raccoon, the scientists tattoo an identifying number on some shaved skin near its right foreleg and fasten a numbered tag to one of the animal's ears. They also draw a blood sample and, equally important, inject the raccoon with rabies vaccine.

While there is some hope of giving

Rock Creek's raccoon population an edge against rabies, the main object in vaccinating the animals has been experimental. "There's been very little work in wildlife with the vaccines available, which are really prepared for domestic animals," says Richard Montali, a pathologist at the National Zoo. Over the course of the study, vaccinated raccoons have been recaptured and fresh blood samples have been drawn and sent to the Centers for Disease Control in Atlanta. By studying the samples, scientists can learn whether vaccinated raccoons are building immunity to rabies and how long immunity holds.

But beeps, not blood samples, will tell researchers the most about Rock Creek's raccoons. Of the nearly 300 raccoons trapped for the study, more than 40 have been fitted with lightweight radio collars. Battery-powered transmitters in the collars pulse either 55 or 80 times a minute, and each raccoon broadcasts over a different frequency. Day and night, Manski and other members of the radio-tracking team patrol the park and surrounding streets in pursuit of raccoon radio signals.

"We're following ghosts with beeps," says Manski of the work. Denned up in an oak or an attic, or foraging under cover of darkness, the raccoons are more often heard than seen. But properly identified, each raccoon beep represents, according to the scientist, "a point in space"—one more datum to help the researchers plot patterns of raccoon movement, the location of

home ranges and the scope of interactions between individual animals.

Because raccoons are generally nocturnal, so are their trackers. Sunset to sunrise, Manski puts about 100 miles a night on the odometer of his Park Service station wagon. Wearing earphones and listening to the beeps pulled in by an antenna on the roof of the car, Manski homes in, cruising streets and back alleys until the strength of a raccoon signal tells him to park. Outside the car, he switches to a handheld antenna and sweeps the night air to pinpoint the animal's probable location. If a raccoon appears to be inside or atop a house, Manski notes the address on a clipboard. If the beeps are coming from the park, he takes compass bearings to plot the animal's position on a map.

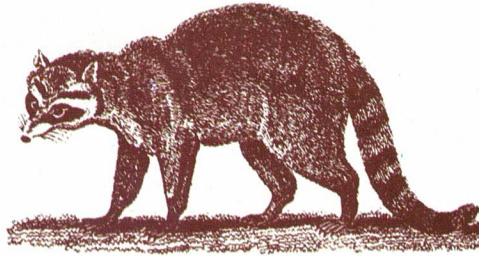
Nineteen of Manski's radio-collared raccoons live in Crestwood, a residential community wedged into a corner of lower Rock Creek Park. With his earphones and antennas, and wearing his khaki vest with "NPS Wildlife Survey" stenciled in green on the back, the biologist is a familiar sight in the neighborhood. One evening at 6:30, Manski stood beside the station wagon and stared up at a Crestwood chimney, wondering whether the shadowy form between two flues was one of his study animals. A jogger breezed by in the semidarkness. "Trailing raccoons?" he asked, not missing a step.

One hour later, after picking up a signal from an adult female raccoon known as Number 141, Manski paced in the street near an intersection. Pausing, he lifted the antenna above his head. Turning slowly in one spot, he concentrated on the beeps in his earphones. Then he walked toward a tree at the mouth of an alley and shined a flashlight into its upper branches. Two green eyes glowed back at the scientist. "You sleepy thing," said Manski, noting the fix on his clipboard.

Following four Crestwood raccoons that night, Manski logged each animal's position about once every 45 minutes. Number 179, another adult female, set the pace for adventure. At 10:30, Manski watched her clamber up a television antenna anchored to a chimney. "I wonder what *that* does to their reception," said the scientist. Three hours later, she dropped underground, taking her beeps with her, and Manski walked the street with his antenna aimed at asphalt. "When they duck into a sewer

you totally lose the signal unless you're right on top of them," he added.

Still later, parked in a Crestwood cul-de-sac, the scientist tuned his small radio receiver and fanned the dark with the antenna. As he stood there, a police helicopter made its own sweep of the night sky. A siren wailed in the distance.



Raccoons find their dinners in our garbage cans and their highways in our sewer lines

In the scientist's earphone, a burst of CB chatter drowned the beeping of a ghostly raccoon.

For some area residents, Manski is the ghost in the night. More than once that evening, homeowners peered from windows at the man in the street waving a wand at their roof. From time to time, restless citizens send the police chasing after the biologist in the dark.

Before beginning his research, Manski contacted the Secret Service, which guards Washington's foreign embassies. Several embassies lie within Manski's study area and he was concerned that suspicions would be aroused by the sight of a man wearing earphones and carrying radio gear. He says the Secret Service wanted to know what the radio collars looked like. "They were worried someone would call them and say, 'There's an animal with a bomb on it,'" recalls Manski. The scientist also introduced himself to some diplomats. At Czechoslovakia's embassy, he was given a tour of the grounds and an official pointed out raccoon dens in the trees. At least one Washington ambassador, the scientist found, sets a nightly table for the raccoons that come lumbering across his guarded lawn.

One of the things Manski hopes to learn from his study is what makes a particular house—ambassadorial or

otherwise—alluring to raccoons. At this point, he and his associates know which homes in Crestwood and elsewhere around the park do extra duty as raccoon apartments. They have watched radio-collared animals emerge from chimneys, roof holes and garages. Eventually, says Manski, "we may be able to better predict what is attractive to a raccoon."

By learning how city raccoons spend their time, Manski also hopes to gather clues about how rabies moves through an urban wildlife population. For example, if city raccoons prove more social than their country kin, he notes, "there may be instances of contact denning together—that may help us explain the spread of rabies."

Trapping the animals to reduce their numbers seems an obvious way to counter the threat of rabies. But many experts advise against it. "You have to kill such a large proportion of the animals to have an impact," says Suzanne Jenkins. "And any time you remove a raccoon, you just create a space for another raccoon to move into."

More than likely, rabies relief for the Mid-Atlantic lies in reshaping human raccoon interactions. At a Johns Hopkins symposium, David Manski showed color slides lent by a Crestwood fan that, for 20 years, has fed dog food and table scraps to backyard raccoons. In the photographs, a gang of chubby raccoons crouched over plastic bowls set out on a picnic table. Many Washingtonians—from ambassadors on down—ring the raccoon dinner bell. But when rabies comes to town, says Manski, "some hard decisions have to be made, such as whether you prohibit public feeding."

"Rabies is going to be here for a long time," says the biologist. Thus, while making his rounds, Manski urges Washingtonians to have their cats and dogs immunized against the disease. He tells homeowners bothered by live-in raccoons to cap their chimneys with screens and to patch holes in their roofs. "You don't *control* raccoon rabies," notes Manski. "You change the carrying capacity of the habitat so there won't be so many raccoons." The locking of a garbage can, he adds, is one of our best defenses against a scary disease.

Washington, D.C., writer Mike Lipske specializes in natural history. Photograph by Louie Psihoyos lives in New York City.



Federation's Growth Gives Muscle To Conservation Programs

"BEST MEETING WE'VE EVER HAD!" That's what enthusiastic delegates and members are saying about NWF's 49th Annual Meeting in Washington, D.C. Some of the highlights:

- Jay Hair, executive vice president, reported that the total number of Federation members and supporters has jumped from 4.1 million to 4.5 million during the past year. This gives NWF more muscle to advance the cause of conservation on many fronts.

- Delegates began work early and stayed late, debating and discussing the 35 resolutions that will set the framework for NWF action during the coming year. They covered such critical subjects as acid rain, soil erosion and illegal fencing of public lands.

- Two key administration officials — Secretary of Interior Donald Hodel and EPA Administrator Lee Thomas — tackled some of the tough issues, freely answered questions and praised the effectiveness of the National Wildlife Federation.

- Delegates not only talked about wildlife, they saw it: Cathryn Hinker of the Cincinnati Zoo brought Angel, her cheetah, on stage. Jim Fowler of television's "Wild Kingdom" had Katie, a Harris' hawk, fly out over the audience. Roy Geiger presented Wigiwiwa, a bald eagle.

- Sixteen people and organizations were honored for their outstanding achievement in conservation. And William Ruckelshaus, past administrator of EPA, was named "Conservationist of the Year."

- A giant replica of the National Wildlife Week poster, "SOIL — You Can't Grow Without It," was unveiled. Pete Myers, chief of the Soil Conservation Service, did the honors as Mr. and Mrs. Jack Myers, whose farm was fea-



Conservationist of the Year, William D. Ruckelshaus was cited for his commitment to environmental cleanup during his second term as EPA Administrator. NWF President Benjamin C. Dysart III (left) and Executive Vice President Jay D. Hair (right) made the presentation.

tured in the poster, looked on.

- Affiliate committees tackled such topics as legislation, national affairs, public relations, education and international affairs, digging into issues of concern to conservationists in all 50 states.

- And there was some fun. Many toured the White House. Board members had a reception on Capitol Hill honoring NWF's legislator of the year, Congressman Silvio O. Conte of Massachusetts. Life members saw how NWF's new public service announcements were made. They had some glimpses of stars Rowlf the Dog from the Muppet Show and actor Eddie Albert. Dr. James Boron, president of the International Association of Profession-

al Bureaucrats, entertained with a wry look at the pitfalls of working in a big organization. And there was an overflow crowd for a "Chesapeake Bay Party" at Laurel Ridge, the Federation's Virginia offices.

Ruckelshaus: Kudos For The Federation

Here are some quotes from the key speeches at the 49th Annual NWF Convention:

- "I commend the National Wildlife Federation for its intelligent, forward-looking attitude on solving environmental problems. Since NWF has a membership three times larger than all of the other conservation organizations combined, this is most signifi-

cant." — William Ruckelshaus, former EPA Administrator

- "The United States has gone much farther in developing pollution controls than any other nation: For example, Canada will not have auto emission controls until 1988. And in the matter of reducing lead in gasoline, again, the United States is far ahead of the rest of the world." — Lee Thomas, EPA Administrator

- "When President Reagan nominated me to be the 45th Secretary of the Interior, he gave me a series of charges. They are:

- "To preserve the nation's wilderness and wildlife resources.

- "To enhance America's ability to meet our energy and mineral needs with domestic resources.

- "To increase the supply of quality water resources.

- "To continue to improve the federal government's relationship with state and local governments.

- "To develop the economic and social resources of American Indians, native Americans and the people of the U.S. Territories." — Donald Hodel, Secretary of the Interior

Delegates Address Conservation Issues

The major conservation issues of 1985? Here's the way delegates to the 49th Annual Convention of the National Wildlife Federation size them up:

Habitat Loss is the greatest problem for fish and wildlife. And it is exacerbated by "poorly planned government projects, inappropriate incentives to the private sector and poor land use planning. NWF believes "most habitat problems can be prevented, or at least mitigated."

Water resources continue to be (continued on page 27)

Renewing Our Dedication To The Conservation Ethic

I DELIVERED MY FIRST ADDRESS as this organization's chief executive officer in March 1981. I can still recall clearly my excitement and pride at taking the reins of the National Wildlife Federation.

Today, as I look on this gathering of committed conservationists—representing our great diversity and strength—I am even prouder to be part of this magnificent organization. I often think back to the momentous event 49 years ago when a group of dedicated conservationists from across the United States, led by Ding Darling, founded the National Wildlife Federation. I believe they would be very proud of today's Federation, recognized as the world's largest private citizen conservation education organization with 4.5 million members and supporters.

But I suspect they would be more concerned about where we are going than where we have been. For those who dare to dream big dreams are also the people who welcome the future because they recognize that all too soon the future will be the past.

Therefore, as the National Wildlife Federation moves toward its second half-century, we ponder the horizons of tomorrow. How will the celebrants of the Federation's 100th anniversary judge those of us who lead it today? Will we be judged as responsible stewards of our natural resources? Will we have protected the environment adequately during our short watch?

We strive today in hopes that the answers will be "yes" tomorrow. But we fully appreciate the difficulty of long-range forecasting when we see how much the world has changed during the past few decades.

Who could have envisioned 30 years ago the impact of the first Earth Day in 1970 on America's conscience? Indeed, few did. Only later did one news commentator, reflecting on the nation's heightened environmental awareness, observe, "Not since the Japanese attack on Pearl Harbor has any public issue received such massive support."

The United States is leading the world's pace in change. Two hundred Americans are born every hour, clamoring to be fed, clothed, housed and educated. By the year 2000, the U.S. population will have grown from 230 million to more than 300 million. Ninety percent will live and work in cities.

Every hour of every day, we lose 220 acres of our

(From a speech at the NWF Annual Meeting)

nation's farmland. We lose 35,000 small farms annually. Three million acres of rural land are lost to non-farm purposes each year.

Each year, we lose more than 6.4 billion tons of soil to erosion, enough soil to fill 300 million dump trucks.

Even more dramatic is the annual loss of land that could be wildlife habitat. The loss is so great that it is equivalent to the yearly construction of a mile-wide road running 3,000 miles from Manhattan to Los Angeles.

In the wake of such drastic changes, it is essential that we remember: "We do not inherit the environment from our ancestors. We borrow it for a period of time from our children."

Some in our society forget that. Through their greed and false worship of the dollar, they would carelessly exchange our priceless natural heritage for more personal wealth.

That is why the conservation-minded members and supporters of the National Wildlife Federation must share a special vision for the future, a vision that recognizes the kinship between man and nature.

We must renew our dedication to the conservation ethic. But we must go a step further, establishing a world in which the twin goals of economic development and responsible environmental protection can succeed in harmony.

We must remove false dichotomies where they exist. Rather, we must work to acquire even broader public support for a positive and responsible agenda on environmental matters. We must pursue a world in which our society's health is measured by both the Environmental Quality Index and the Gross National Product.

Let's sound neither a battle cry nor a call to retreat on environmental issues. Instead, let's today transform our vision for the future into the reality of positive actions. For we won't pass this way again.

Jay D. Hair

Executive Vice President
National Wildlife Federation



REPORT ON THE 49th ANNUAL MEETING

Long time conservationist, Carl Crouse, was elected president of NWF. Five new board members were also elected: Richard Day, Donald Hamilton, Charles T. Haskell, Gordon G. Meyer and Gene G. Stout.



DENNIS A. JOHNSON



BOB STROHM

Jim Fowler, of television's "Wild Kingdom," introduced Katie, a Harris' hawk, at one of the general sessions. Members of the audience were thrilled when Katie flew back and forth over their heads.

Lee Thomas, administrator of the Environmental Protection Agency, told meeting participants that the American public can expect both quantity and quality from EPA's enforcement program.



(continued from page 25)
mismanaged and polluted—despite the fact that "America has abundant supplies of fresh water." NWF recommends local cost sharing, user fees, better planning and mitigation for damages to wildlife habitat by government-sponsored water development projects.

Soil erosion "continues to plague our nation, reducing productivity of the land and strangling our rivers and harbors. It is also the primary cause of the nation's greatest water quality problem—non-point or runoff pollution." Too often "federal farm policies encourage practices that increase erosion." Farm subsidies should encourage soil conservation and protection of wildlife habitat.

Public land laws require "balanced solutions to conflicting goals of natural resource development and environmental protection on the nation's 700 million acres of public lands." A return to balanced stewardship is sorely needed.

An energy policy that protects the environment, encourages efficient use and promotes development of safe and renewable energy resources was strongly urged by NWF delegates.

Toxic chemicals continue to "contaminate the food we eat, the water we drink, the air we breathe and the habitat on which all living things depend." NWF emphasizes the need to clean up

dumps, regulate toxic chemicals in drinking water, protect groundwater supplies, regulate hazardous air pollutants, expand safety testing of pesticides and strengthen regulation of ocean dumping.

Third World conservation must be supported by the United States through increased funds and technical expertise. "The famine in Africa, a result of dec-

ades of environmental degradation, demonstrates the worldwide scope of natural resource problems."

Tax reform should remove "unnecessary federal incentives for logging, mining, energy extraction, conversion of natural areas to agricultural uses and wetland destruction."

Proposed budget cuts should be fair. While recognizing the need

to control rising federal deficits, NWF believes "the resource conservation programs are being asked to bear more than their fair share of budget cuts."

Delegates debated and passed 25 other resolutions, including the environmental effects of MX missiles and the excessive payment of damages caused by wildlife. Other issues on the agenda: siting nuclear plants, encouraging schools to use Project Wild (a comprehensive conservation education program) and hunting elk in the Grand Teton National Park.

The delegates also passed a joint resolution with the Canadian Wildlife Federation to call for an overall 50% reduction of pollutants that result in acid precipitation in both countries.

Top Conservationists Recognized By NWF

The prestigious whooping crane award — signifying the highest level of achievement in the field of conservation and the environment — was presented by NWF to 16 outstanding individuals and organizations:

Conservationist of the Year: William D. Ruckelshaus is the "pre-eminent environmental administrator of our times." The first head of the Environmental Protection Agency in 1970, he was called back in 1983 to put the EPA back on course. "Under extraordinary circumstances, he



BOB STROHM

Discussing resolutions to be voted on by annual meeting delegates are four affiliate representatives: Meredith Murray, Maine; Lore Sharp, Washington; Robert Moorman, Iowa; and Ramon Callahan, Mississippi.

REPORT ON THE 49th ANNUAL MEETING

has accomplished a record that enhances the quality of our environment for the benefit of all forms of life—both for now and in the future.”

Science Award: George Schaller of the New York Zoological Society has made significant contributions to the conservation of wildlife and their habitats.

Outstanding State Affiliate: The Colorado Wildlife Federation was honored for a wide spectrum of activities, ranging from a non-game tax check-off program which it helped to instate, to acid rain workshops and deer and elk management seminars.

Communication Award: The Louisville Courier-Journal “for 158 years has had a history of sensitivity to environmental issues.”

Corporate Award: Duke Power Company was honored for its many conservation activities. It has the largest in-house environmental staff among all of the nation’s electric utilities—more than 150 scientists and engineers. It has also donated more than 2,800 acres of land for public parks in the Carolinas.

Government Award: Governor Bob Graham of Florida was honored for his statesmanlike approach in pushing the “Save Our Everglades” program.

Education Award: The Yosemite

Institute has provided diverse and challenging learning experiences for more than 70,000 students during the last 13 years.

Legislative Award: Representative Silvio Conte of Massachusetts led the fight to end wasteful, environmentally unsound water projects, and to clean our nation’s air and rivers. He has pushed such diverse projects as wetlands, restoring the Atlantic salmon, acid rain controls, and renewable energy, and has given strong support to the acquisition of habitat for waterfowl.

Organization Award: The Con-

servation Foundation has fulfilled the role of a “think tank” for the environmental movement and is a builder of bridges to other important segments of society.

Special achievement awards were made to the following:

National Geographic Society: Wilbur Garrett, editor of *National Geographic*, accepted the award for his organization’s unique television specials over the past 19 years. NWF “salutes the National Geographic Society for this landmark educational effort, which has been an unparal-

leled contribution to popular understanding of scores of environmental issues.”

Merrill L. Petoskey has been involved in conservation at the regional and national level and left a record of remarkable achievement in every position he’s occupied.

Tracks magazine, publisher of the Michigan United Conservation Clubs, takes the conservation message to students, teachers and families to a degree that could never be achieved through visits and conferences alone.

John F. Turner, majority leader of the Wyoming Senate, has been an integral part of the conservation movement in his state for more than 25 years, translating a child’s love of animals into political power.

Louis Fernandez, chairman of the board of Monsanto Company, helped found Clean Science Inc., an innovative nonpolluting corporation that promises to speed the cleanup of toxic waste sites in America.

Dr. Reuben Trippensee, a pioneer in wildlife management, made timeless contributions with his teachings and professional accomplishments.

The Chesapeake Bay Foundation is the largest nonprofit conservation organization working solely to protect the Bay.

Backyard Wildlife Habitat Program on Television Again

The Federation’s Backyard Wildlife Habitat Program returns to public television again this summer. Joining host Bob Thompson on “The Victory Garden” will be Craig Tufts, Director of Education Centers for the Federation.

They will feature gardening to attract butterflies in addition to prairie and meadow gardening as alternatives to lawn and formal landscaping.

Check local television listings for time and dates “The Victory Garden” will be shown in your area.

How To Enter National Wildlife Magazine’s Photo Contest



For the fifteenth year, the editors invite you to submit your best nature photographs. A total of \$5,000 in cash will be awarded, and winning photos will appear in our December issue and tour the U.S. as an exhibit.

Rules: The competition is open to all amateur photographers except employees of the National Wildlife Federation and their immediate families. Professional nature photographers (those whose primary income is from nature photography) are asked not to enter this contest.

A total of up to five entries (a sequence counts as one entry) in any combination of the following categories may be submitted:

- Wildlife
- People in Nature
- Landscapes and Plant Life
- Underwater Life
- Humor in Nature

- Landscapes and Plant Life
- Underwater Life
- Humor in Nature

Entry in the contest constitutes agreement to allow photographs to be published in *National Wildlife* as contest winners, with limited promotional use, and to be included in the touring exhibition sponsored by the Leigh Yawkey Woodson Art Museum and in its promotion.

Entries must be original color transparencies (Kodachrome preferred) or color prints. Prints may be mounted, but mount size should be no larger than 11 x 14. Negatives must be available for all prints. Do not send glass-mounted slides.

Each photograph must bear the photographer’s name, address and phone number. Include the make and model of camera and lens used for each photo, film used, exposure settings, special equipment if any, and a brief description of where, when, and how each photo was taken. Previously published material can be entered; however, please include information on where and when the photo has appeared. Include a stamped, self-addressed envelope of the proper size or entries cannot be returned.

National Wildlife cannot be responsible for photos submitted. **Deadline:** All entries must be postmarked no later than June 30, 1985. Send entries to: *National Wildlife* Photo Contest, 1412 16th Street N.W., Washington, D.C. 20036.

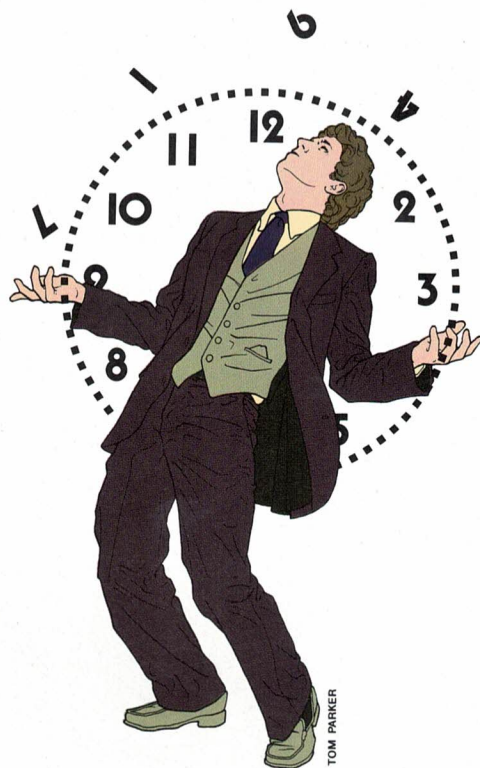
LIFE STYLES

In One Day

Americans can rack up some astonishing statistics

Seven years ago, Tom Parker had an idea. "I wanted to show Americans the amazing amount of food and materials it takes to support our population," says the 34-year-old illustrator from Ithaca, New York. "I thought the best way to do so was by showing how much we consume on a daily basis."

Parker began the arduous task of compiling and computing statistics from government and other reports. In the process, he amassed some hefty statistics of his own: in an average day, he calculates, he read four newspapers from cover to cover, wrote some 60 letters and made nearly 100 phone calls. The results of those efforts appeared last year in his book, *In One Day*. Among his findings: every day...



- Americans throw out 200,000 tons of edible food.

- Americans produce 110,000 tons of salt. That much salt would fill a shaker 214 feet tall and 138 feet in diameter.

- Americans throw out 20,000 passenger cars and 4,000 trucks and buses. In New York alone, more than 20 vehicles a day are simply abandoned. Twenty thousand cars would jam-pack a 55-acre junkyard or form a line of traffic more than 50 miles long.

- Americans driving on unpaved roads stir up 81,000 tons of dust. That's enough to cover a football field—the East Bowl—to a depth of 48 feet.

- Americans produce 33 million pounds of aluminum, enough to make 132 square miles of aluminum foil. And every day, Americans recycle 78 million aluminum cans. That's enough to make 18 Boeing 747 jetliners.

- Public sewers in this country drain off enough organic waste to make 3,000 tons of nitrogen plant food. That's equal to 54 million pounds of fertilizer.

- Americans use 450 billion gallons of

water for their homes, factories and farms. That's enough to cover Manhattan to a depth of 96 feet.

- American drivers use 313 million gallons of fuel—enough to drain 26 tractor-trailer tank trucks every minute. If this country ran out of gas, it would need a gas can 400 feet wide and 332 feet high to get it through the day.

- In one day Americans give birth to 10,000 new Americans.

- The U.S. "center of population," an imaginary point at which the population of this country would balance—north and south, east and west—creeps about 35 feet to the southwest.

- Americans lay about 2,750 acres of pavement. That's enough concrete and asphalt to make a bicycle path seven feet wide stretching from the Atlantic to the Pacific coast.

- Americans bring 2,000 exotic birds into the country that have been cap-

tured in the wild. One-fourth of the birds are dead when they arrive, or die before they find an owner.

- Americans use 6.8 billion gallons of water to flush their toilets. It would take one gigantic toilet a half mile high—twice the height of the World Trade Center—to dump that much water in one flush. The Rose Bowl football stadium could fit inside the seat.

- Americans bring 364,000 live wild animals into the country, 337,000 of which are ornamental fish. They also import 296,000 items that are made out of wildlife.

- Americans collectively grow six square miles of skin.

- Americans throw out 150,000 tons of boxes, bags and wrappers. It would take 10,000 tractor-trailer trucks to haul that much junk to the dump—a line of trucks more than 120 miles long. Some people avoid the dumps altogether. Every day, they sprinkle a million bushels of litter out the windows of their cars and trucks.

- Americans produce 1.5 billion pounds of hazardous waste. If the problem were shared equally, every adult in the United States would have to find something to do with 9 pounds a day. If they stuffed it in 55-gallon drums, the drums would cover 418 acres.

- Americans manufacture enough artificial Christmas trees to artificially reforest eight acres of land.

- Americans pump 365 million gallons of crude oil out of the ground and import another 147 million gallons from other countries. The total is more than half a billion gallons or nine quarts apiece for each American. That's enough to fill an oil can 550 feet tall and 400 feet in diameter.

- Americans gobble up 75 acres of pizza. Imagine 13 pizzas the size of the Roman Colosseum—that's enough food to cover 60 football fields.

Smoothing the Wa



for Salmon

Throughout the Pacific Northwest, volunteers are giving the fish new life in streams that once were wastelands

By Phillip Johnson

BY MID-MORNING, the layers of basalt that run through the walls of Beaver Creek's narrow canyon appear to be melting in the shimmering heat. The stream itself is blue and inviting, but everywhere else the vista is of burnt rock and parched cheatgrass. A crew of young Warm Springs Indians works under the desert sun, cutting the juniper that dot the valley floor, dragging the trees to the water's edge and unceremoniously heaving them in. One bank of Beaver Creek has become an incongruous row of upside-down trees, their tops stirring in the current and their butts cabled to metal posts.

The cheerful fellow in the baseball cap directing this operation is Chris Stainbrook, a fish biologist hired by the tribe to help restore the depleted runs of salmon and steelhead trout that return to spawn in the streams of the Warm Springs reservation on the eastern flank of the Oregon Cascades. This stretch of Beaver Creek, says Stainbrook, wiping sweat from his eyes, "is essentially like a desert to the fish. Right now the place is virtually unutilized by chinook because of the temperature."

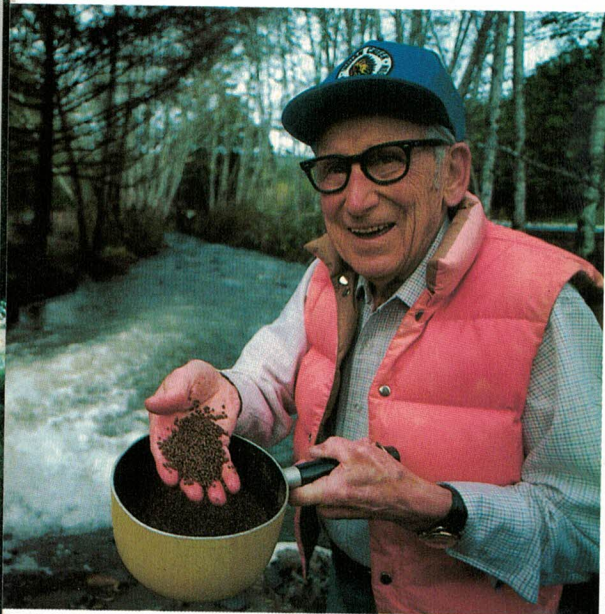
The streambanks in this section of the valley are so heavily eroded that soil continually washes away from them, choking the stream. Because vegetation can't grow there, the water remains unshaded and thus lethally warm for salmon. The upended juniper are a

Pacific salmon like these coho fingerlings once hatched in streams from Alaska to California. But as their habitat declined, so did the fish. Today, conservationists are attempting to reverse that decline.

TERRY DOMICO (EARTH IMAGES)

Products of enhancement efforts, these chinook fry (opposite) were bred in captivity to help bolster depleted salmon stocks. Eventually, they will be released in a stream and begin their trip to sea.

In southern Oregon, 84-year-old Robert Knox grabs a handful of pellets to feed some of the 100,000 chinook fry reared in his pond (below). Knox hatches the young fish as part of a statewide effort.



DAVID FALCONER

crude but effective means of helping to solve such problems. "The juniper will absorb the energy of the stream and protect these banks from further erosion," Stainbrook predicts. "Sediment from upstream will drop out in the branches. That will give vegetation a place to grow. The vegetation canopy is crucial to lowering water temperatures."

Beaver Creek's waters eventually find their way to the Columbia River. Salmon spawned in the creek follow the long route to the ocean, live in the Pacific for several years, and then retrace their labyrinthine pathway back to this valley. If the day's work has been successful, this stretch of creek will again provide habitat for a few more fish in the years to come.

Such small, patient steps, smoothing the way for vast migrations, have come to be known all along the West Coast as "salmon enhancement." It is a growing movement with thousands of volunteers from southeastern Alaska to Monterey Bay in California. Its goal: to help reverse the decline of Pacific salmon.

Restoring the salmon's despoiled

habitat requires a mosaic of activities. Different streams have been damaged in different ways, and thus require different remedies if the fish are to return in large numbers. Salmon enhancement is in effect the art of imitating nature. "All enhancement efforts should aim toward emulating biological processes," says George Westfall, a biologist with Oregon's Salmon and Trout Enhancement Program (STEP). "But they should also speed up those processes to restore production. We try to go into an area and do in a year what nature would do in ten."

Enhancement isn't a cure-all, however. "It can be a useful tool but it's no solution to the major habitat destruction that continues in parts of the Northwest," notes Terence Thatcher, a National Wildlife Federation attorney based in Portland, Oregon. "However, these enhancement workers deserve a lot of credit for what they're trying to do."

Some 230 miles southwest of Beaver Creek, across two mountain ranges and a world away for salmon, Robert Knox stands beside a pond on his Indian Creek ranch. The water is slate gray under the ocean fog; mist hangs in the branches of the surrounding spruce trees. Quietly, Knox reaches into a bucket, pulls out a handful of pellets and flings them into the pond. There is a sudden rippling noise, and the water begins to churn furiously.

The Knox pond, created artificially from a meander in the stream, is currently home to about 100,000 fall chinook fry, raised from eggs gathered by volunteers working through STEP. When the young salmon "smolt"—become ready to go to sea—they will be released. They won't have far to travel to reach saltwater: half-a-mile or so down Indian Creek to the Rogue River, then down the Rogue for less than a mile to the ocean.

With luck, as many as 5,000 of these chinook salmon will return as adults anywhere from two to five years later. Their progeny, in turn, will be planted upstream in Indian Creek and in other nearby streams depopulated of salmon by a century of dam-building, logging and overfishing.

Robert Knox is 84; his hair is white and his face furrowed. Standing beside him, feeding the fish on this misty afternoon, is his vigorous, broad-chested grandson Scott, 26. The family's ambi-

tions are large. "This," pro senior Knox, "is a three-generation effort to reestablish the salmon lower Rogue."

The Knoxes, with Westfall, have built what is in effect a hatchery for public use on the property. The family operates a camp at the mouth of Indian Creek, popular with fishermen, and they make no claims of altruism. "It's tourism," says Scott. "To get here we need to provide some amenities for fishing. So we decide the fish ourselves."

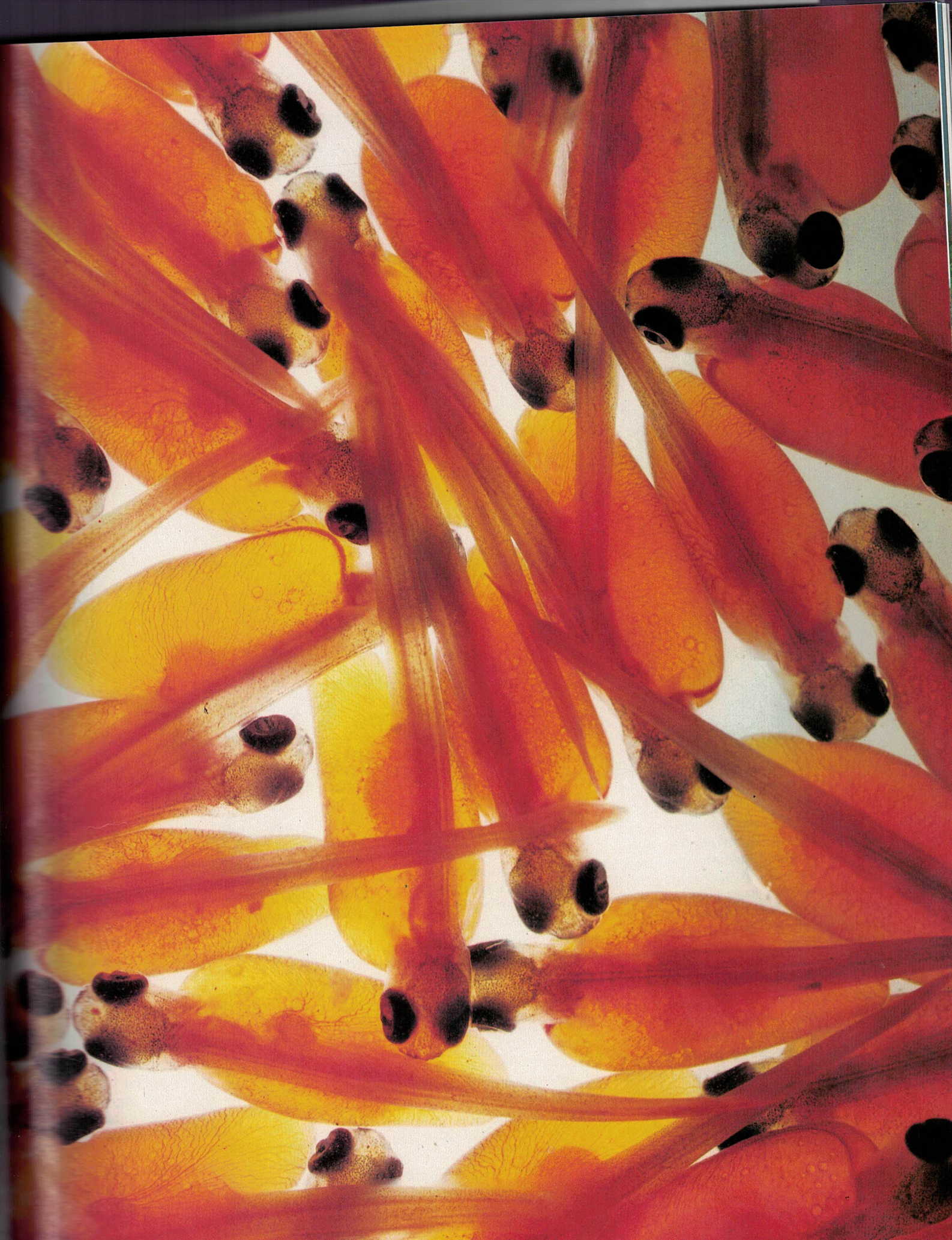
Such efforts to bolster the Coast's salmon runs directly, by fish in hatchboxes or ponds and the smolts to sea, represent one facet of enhancement. While some volunteers are attempting to restore salmon's habitat, others are acting as midwives to future salmon generations, hoping that by the time the young fish return, a newly hospitable environment will greet them.

All species of Pacific salmon are anadromous, a Greek word that means "running upward." They hatch as egg in fresh water, mature for a short time in the stream, journey to the ocean to adulthood there and return upstream up the current. Although the instinct is not infallible, the fish usually spawn in the stream where they hatched.

Historically, salmon supported the entire Pacific Northwest coast. When the first European settlers arrived in the region, the fish runs were described as being "so thick you could walk on their backs." In the 19th century, fishermen scooped out millions of pounds of the fish every year in the region. It didn't take long, however, for most salmon runs to decline drastically. Today, wild chinook and coho salmon are imperiled throughout their range.

Overfishing has indeed contributed to the decline, but so have construction, pollution, irrigation, logging and mining. Their migrations bring salmon into contact with anything that affects water anywhere in the region.

"In the beginning, I don't think people thought there could be a problem with the fishery—they thought there would be salmon forever."





Bill Hill, a commercial troller from Eureka, California. "Now, I think people realize that the only way there's going to be salmon in the future is if everyone pitches in and helps."

The first attempts at salmon enhancement began in the 1930s. In those days, most efforts were spent removing logjams and other materials from streams. Such obstructions were perceived as barriers to salmon migration. More recently, biologists have realized that woody debris and even logjams can be a critical part of the fish's habitat. In addition, many early volunteer groups operated under the misconception that fish numbers could be restored simply by dumping artificially reared salmon fry into the streams.

During the 1980s, however, the enhancement movement has shifted em-

phasis in many places from just raising fish to also restoring habitat. Local efforts are coordinated under such organizations as Oregon's STEP and British Columbia's Salmonid Enhancement Program. Through the "adopt-a-stream" strategy, citizen groups are now taking responsibility for entire watersheds.

The broad-based program George Westfall directs for STEP along the isolated southern Oregon coast typifies the complexity and variety of salmon enhancement today. Westfall has mobilized some 300 volunteers since 1981, with as many as 80 people constantly on call.

Westfall himself fits a job description that has only existed for a decade or so:

the "enhancement biologist," a tricky role, one that involves biologist, part technician and part naturalist. The 31-year-old scientist has involved everyone from schoolchildren to professional citizens in his program. In the past year, he logged 108 individual projects, ranging from classroom projects to major construction projects such as carving jump pools out of rock with dynamite to enable fish to pass a natural falls and utilize spawning grounds. In the past year, volunteers last year handled 1.6 million chinook and steelhead eggs and stored 42 stream miles of habitat.

Oregon STEP volunteers have learned to anchor logs or gabions with indrical wire structures filled with rock—across a stream in such a way that they will break up floods,

on their upstream sides to build spawning beds and create sheltering areas beneath their downstream faces. They have worked to stabilize stream banks by planting willow or cabling them to the banks to deflect the current from eroding areas. At times, their work has been completed far from the water itself; one project involved fencing off vulnerable stretches of creeks to prevent cattle from trampling the fragile edges.

In a typical project, volunteers tackled Euchre Creek, a short coastal stream that once churned with chinook, coho and steelhead each fall and winter. In the early 1960s, however, timber companies clearcut almost the entire drainage, running equipment through the wooded and leaving gashed and denuded slopes that unleashed torrents of sediment. Until recently, Euchre Creek was still a muddy wasteland, the current wandering here and there between unstable banks, devoid of salmon. The STEP participants—largely commercial and sports fishermen from the immediate vicinity—studied the length of the creek and came up with a master plan for restoring the fish habitat.

Meanwhile, work on reviving the fish population continued apace. At first, borrowed hatchery stock from the Rogue River was used; up to 70,000 juveniles were released each year. The first returns from these early releases have begun to put in an appearance in the stream, now that some usable habitat awaits them. Last year, the workers shifted to harvesting some of these returning spawners to serve as brood stock; their eggs were fertilized, incubated, reared in ponds and will be released back into the stream.

"We're basically trying to seed the habitat that's available," Westfall says cautiously. "We're not really trying to work toward a goal for optimum numbers we'd like to have returning. We don't talk about 'optimum'—'self-sustaining' is our key word." Of the ten river systems in his district, notes Westfall, only two have "healthy" runs. But, the biologist adds confidently, "We can achieve a 200 percent increase in wild fish in the region."

It is an exhilarating experience to see salmon return to a restored stream. But conservationists are quick to point out that enhancement by itself won't solve the salmon problem. "Don't let anyone fool you," says Dave Loomis, another STEP biologist. "We're doing things to

improve the situation here and there, but we're still losing habitat every day!"

"No one should view enhancement work as a substitute for habitat protection," adds Terence Thatcher. "If habitat is important enough to repair, then it's valuable enough to protect. And protection is cheaper and more efficient than correcting avoidable mistakes."

For years, Thatcher points out, the nation built dams on the Columbia River without providing adequate fish passage for fish that needed to migrate downstream. "Now," says the attorney, "we're belatedly trying to retrofit those dams so the fish can get past them. And even if we succeed, we still can't replace the habitat that's lost forever." Indeed, according to Thatcher, dams have blocked or inundated more than half of the historic anadromous fish habitat in the Columbia basin.

Logging has also taken a heavy toll on salmon habitat, leaving streams choked with silt and debris and denuded of vegetation. In the mid-1960s, for instance, the South Fork of the Salmon River—the most productive salmon stream in Idaho—was literally buried in thousands of tons of sediment from landslides due to logging road construction. "No one could repair the damage," says Thatcher, "and even now, 20 years later, natural processes have still not fully restored the South Fork."

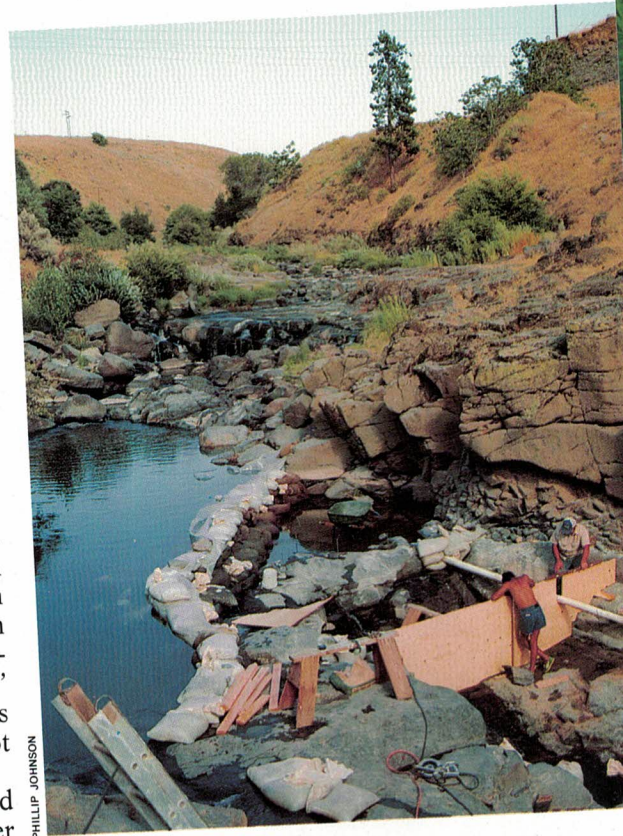
New forestry practices have slowed the damage in recent years; now, larger streams are often protected by buffer strips and unstable slopes are sometimes left unlogged. But the sheer volume of timber cutting means that more and more streams are afflicted. What's more, notes sportsman Bill Bakke, a member of the STEP advisory committee, "The policy direction of many of the agencies involved in timber production is still counter to the work being done to restore individual streams."

Like other conservationists, Bakke is concerned that timber companies and utilities will "hop on the enhancement bandwagon," arguing that they should be allowed to cut more wood or divert more water because they can rely on future stream restoration efforts to mitigate their damage. "Enhancement," adds Bakke, "should not be used as an excuse for future abuse."

Because many enhancement projects are still experimental, problems will oc-

An adult coho displays the hooked jaw and reddish coloring characteristic of spawning males (opposite). Unlike the Atlantic salmon, which return to sea, the Pacific species die after spawning.

Guided by a biologist, volunteers construct an artificial fish passage on an Oregon stream (below). "People are making a strong emotional investment in streams," says one state official.



cur. Many of the gabions now being installed won't function as expected, many of the boulders placed in streams to provide cover will wash out, many of the fish raised in ponds won't prosper in the wild. But even with such failures, there can be success.

"Public involvement in enhancement is probably more important for the social benefits than for the fish it produces," argues Bakke. "People are making a strong emotional investment in streams. They're less willing now to walk away when something threatens those streams. They're adopting a stretch of water and becoming its protector." ■

Oregon journalist Phillip Johnson wrote about how scientists are using beaver to help restore damaged streams in the June-July 1984 issue.

STRIKE FORCE

In Los Angeles, a tough investigative team is making life miserable for corporate polluters

By Mark Wexler

WHILE repairing a road in Los Angeles last summer, a city worker got a grim surprise. When he pulled up a section of pavement, a mangled black barrel popped up with it. Through the hole below, the worker saw a deep cavern filled with dozens of other barrels, some leaking a foul-smelling liquid. He called the city's Toxic Waste Strike Force.

Within minutes, the unit arrived at the scene. In the 24 hours that followed, the strike force pulled 254 barrels out of the hole, all filled with dangerous chemical wastes. "We began an investigation that soon led us to the source of the barrels, a local manufacturing company called American Caster," says Barry Groveman, the 31-year-old special assistant to the district attorney who heads up the unit.

Groveman learned that company officials had told their employees to bury the barrels away from their own property. "The chemicals were so flammable that they could have caused a major disaster if they ignited," notes

the prosecutor. "In my view, that is a violent crime against the community, and those responsible should go to jail."

Last winter, Groveman got his wish when a municipal court judge fined the company \$20,000 and sentenced its president and vice president to six months in jail. They were also ordered to take out a full-page advertisement in the *Los Angeles Times*, admitting their guilt. It was not the first time the strike force had put corporate polluters behind bars.

Since its inception in 1982, the strike force—which includes investigators from the city's police, fire and sanitation departments, and from the Los Angeles County Health Department—has had a remarkable record. In the dozen or so cases it has filed, ten corporate officers have gone to jail. "Your basic white-collar executive who makes a decision to illegally dump toxic wastes may believe that a fine is just the cost of doing business," says Ira Reiner, the L.A. County district attorney who created the strike force. "We have to make jail the cost of doing

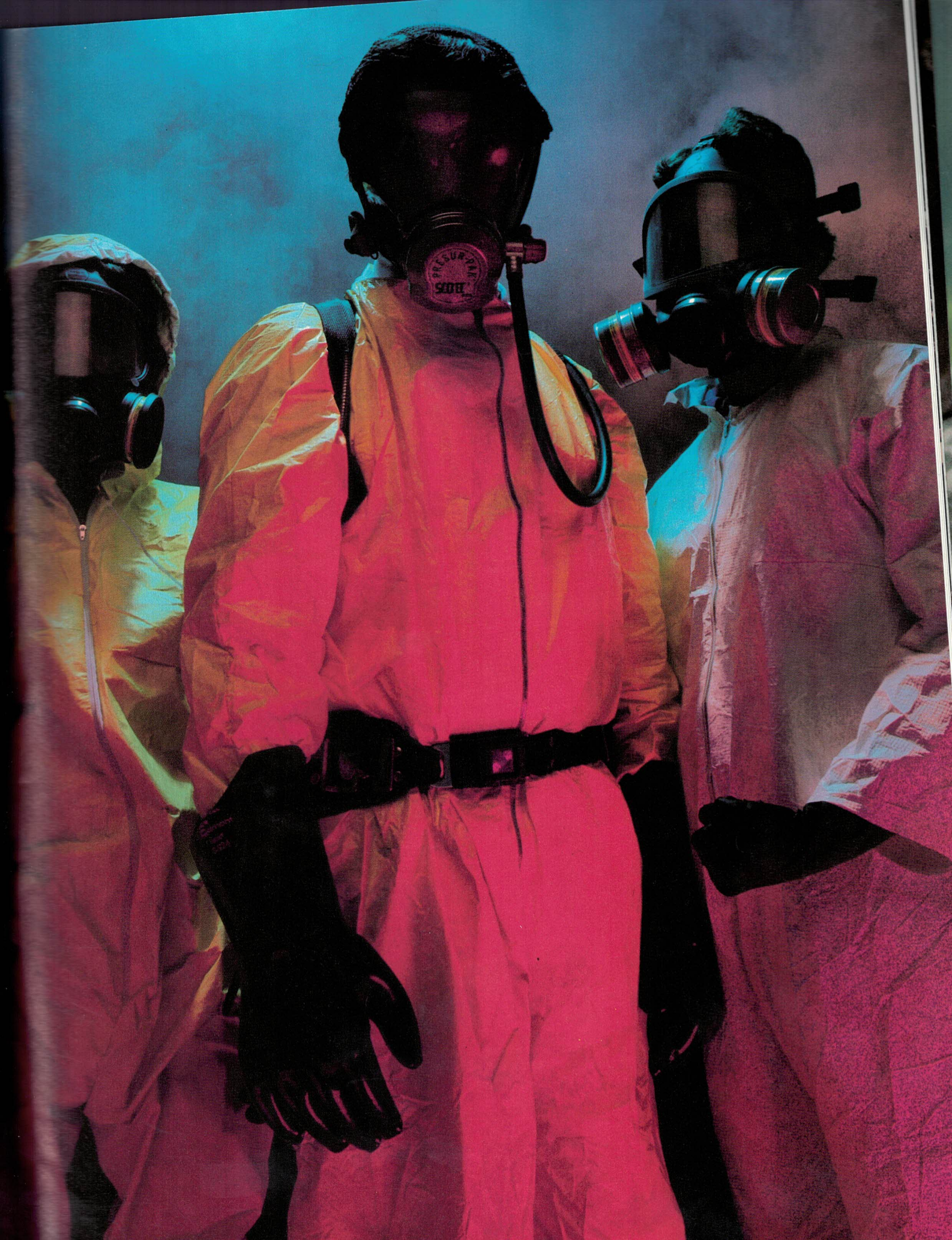


Man with a mission, city prosecutor Barry Groveman (above) heads up the Los Angeles Toxic Waste Strike Force. Under his lead the unit attempts to stop illegal chemical waste dumping.

Space-age pollution detectives, strike force members wear protective gear (opposite) while gathering evidence in sewers and factories. Almost all of their cases have ended in convictions.

JIM CORNFIELD

JIM CORNFIELD (WEST LIGHT)



such business.” Adds Groveman: “We’re not on a campaign against all industry. We’re after the intentional, clandestine violators.”

Until recently, few American judges considered environmental law violations as criminal acts. Because such violations were often misdemeanors, judges were reluctant to impose jail sentences. But in the last three years, prosecutors have begun to seek stiffer

STRIKE FORCE

“We’re not on a campaign against all industry. We’re after the intentional, clandestine violators.”

penalties and many judges have responded. Two years ago in New Hampshire, for instance, five executives of the A. C. Lawrence Leather Company were indicted by the U.S. Justice Department for dumping chemical refuse in a local river. Though none of those executives went to jail, they were fined \$475,000—one of the largest fines ever imposed in this country for an environmental crime and the first major criminal prosecution under the federal Clean Water Act.

In Maryland, meanwhile, a state strike force succeeded last year in obtaining a six-month jail term for a Baltimore businessman who had repeatedly broken clean-air rules. Elsewhere, courts in Michigan, Missouri and New Jersey have also imposed jail sentences for environmental crimes in recent months. “We try to inform judges that fines and other civil penalties are often not enough to stop such crimes,” says Judson W. Starr, director of the Justice Department’s three-year-old Environmental Crimes unit. “We want everyone in the business community to respect environmental laws, and we believe that one successful criminal prosecution can have as much impact throughout the country as ten civil cases.”

In recent years, the Environmental Protection Agency has had neither the

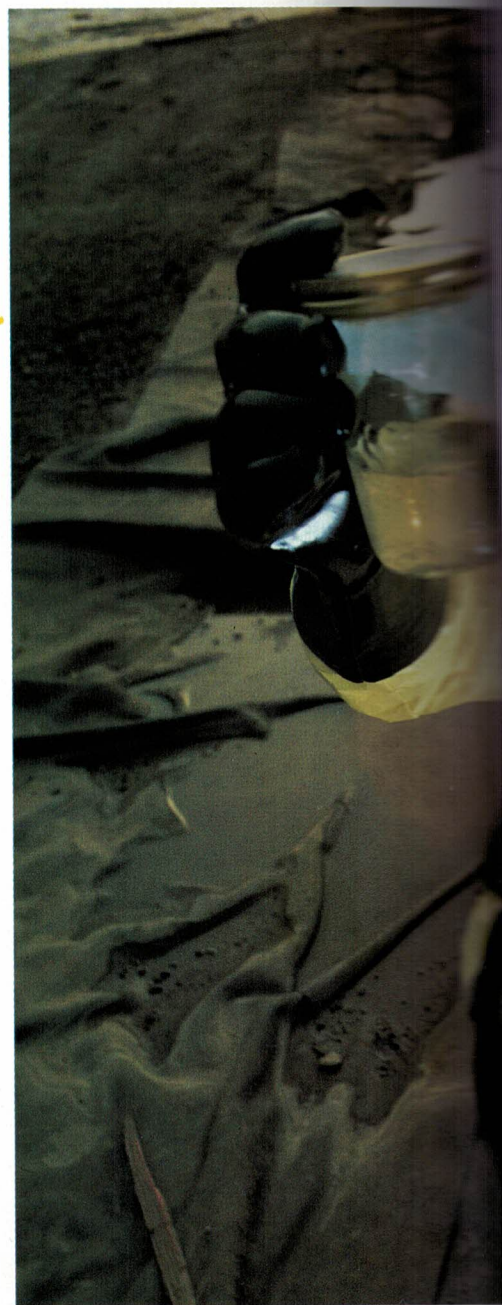
funds nor the manpower to conduct an effective criminal enforcement program. But under former Administrator William Ruckelshaus, the agency belatedly began to recruit skilled investigators from other law enforcement agencies. “We are continuing to build that program,” notes new EPA Administrator Lee M. Thomas, “and we will aggressively seek criminal sanctions against many polluters.”

A year ago, the EPA gained law enforcement powers for its investigators, who can now execute search warrants and carry firearms. “We’ve clearly been mandated by Washington to expand our criminal enforcement efforts,” says Pat Parenteau, chief counsel for the EPA’s Region I offices in New England—a hotbed of illegal waste dumping.

Currently, the EPA has 37 experienced investigators throughout the country. “Considering that we didn’t have any criminal investigators just two years ago, that’s a significant increase,” observes Terrell Hunt, the EPA’s chief criminal enforcement attorney. Since 1982, the Federal government has obtained convictions of some 60 defendants; nine of them went to jail and more than \$1 million in fines were collected.

Though EPA authorities can’t estimate how much of the 71 billion gallons of hazardous wastes generated each year in this country is being dumped illegally, there is little doubt that huge quantities are going directly into sewers, rivers and streams. “Almost three-fourths of our criminal enforcement cases involve illegal handling of hazardous wastes or toxic chemicals,” notes Hunt. “Thus, we encourage state and local programs like that in Los Angeles.”

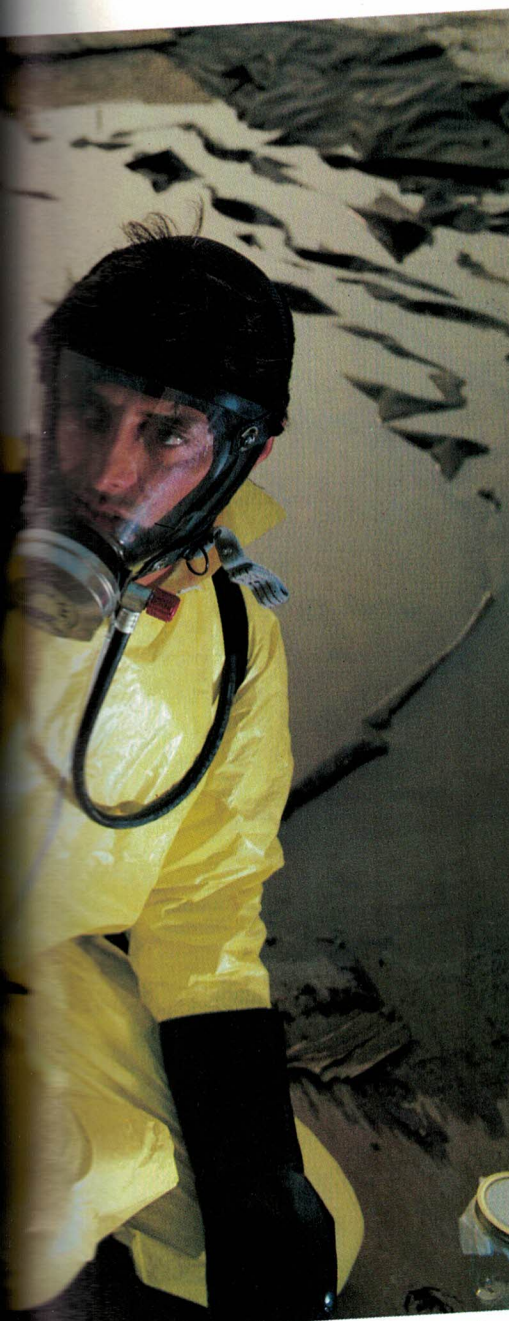
The roots of that program date back to 1979, when Groveman received a tip that a local plastics company was illegally disposing of its chemical wastes. At the time, the young attorney had just begun working as a special prosecutor in the Los Angeles City Attorney’s of-



Strike force member Dan Fresque a sample of waste seepage at a dump very expensive to dispose of toxic w

fice. Operating under a state law, he filed charges against the plastic company and won. The offenders were fined \$10,000—the first major pollution case in California history.

Three years later, the strike force was formed. “It became clear to us that we had to try something other than the and-miss approach because illegal dumping was so prevalent,” says Groveman. The team didn’t wait long. One of their first targets was David Peairs, then president of the franchise of Culligan International.



building from company files to sewer connections. They found that the firm was indeed discharging as much as 12 tons a year of a known carcinogen into city sewers.

"When the company's lawyers contacted me, I told them I wouldn't accept anything less than jail," recalls Groveman. They laughed. No one had ever gone to jail in California for violating an environmental statute. But in the end, after analyzing the prosecution's case, the attorneys advised their client—who, ironically, had once won a local conservation award—to plead "no contest." The company was fined \$100,000, and Peairs was sentenced to three months in jail.

"We were criticized by Peairs' attorneys for not giving a warning before we got the search warrant," admits Groveman. "But that would have been as ludicrous as giving a robber a warning as he walks out of a bank." The jail sentence sent shock waves through the California business community. Other Culligan franchises were the first to respond. They took out a full-page advertisement in the *Los Angeles Times*, disassociating themselves from David Peairs. "It's expensive to dispose of toxic wastes legally," adds Groveman, "and thus, there are tremendous incen-

tives to be dishonest. We're trying to create incentives for being honest."

One executive who didn't get the message was Charles Wehrly, vice president of the Precision Specialty Metals Company. The company, which is located right on the border between the city of Los Angeles and Los Angeles County, had found a unique way to dump chemical wastes into sewer lines without being detected by monitors: under Wehrly's orders, company employees installed a 300-foot pipe in the rafters of the huge facility, which carried the wastes into county sewers. However, a conscientious employee tipped Groveman off and the pirate pipe was uncovered.

Wehrly was eventually sentenced to

four months in jail and, among other things, the company was ordered to take out a notice in *The Wall Street Journal*, describing its crime. "We want people to understand," said Ira Reiner at the time, "that if they break the law, they can go to prison."

Authorities at the Aaro battery plant in south central Los Angeles learned that lesson the hard way. When the strike force entered the plant with a

STRIKE FORCE

"When the company's lawyers contacted me, I told them I wouldn't accept anything less than a jail sentence."

search warrant, it caught startled workers in the act of dumping hazardous wastes directly into the city's sewer lines. One Aaro employee mistook the members of the strike force for federal immigration officers, who frequently search Los Angeles factories for illegal aliens. He continued pumping chemical wastes into the sewer connection while police photographers snapped his picture.

Behind the success of the Los Angeles Toxic Waste Strike Force is its ability to build cases that stick. "Almost everyone we've gone after thus far has pleaded guilty," beams Groveman. As a result of his success, the prosecutor has been approached by a number of local companies that want to improve their own chemical waste storage and disposal methods.

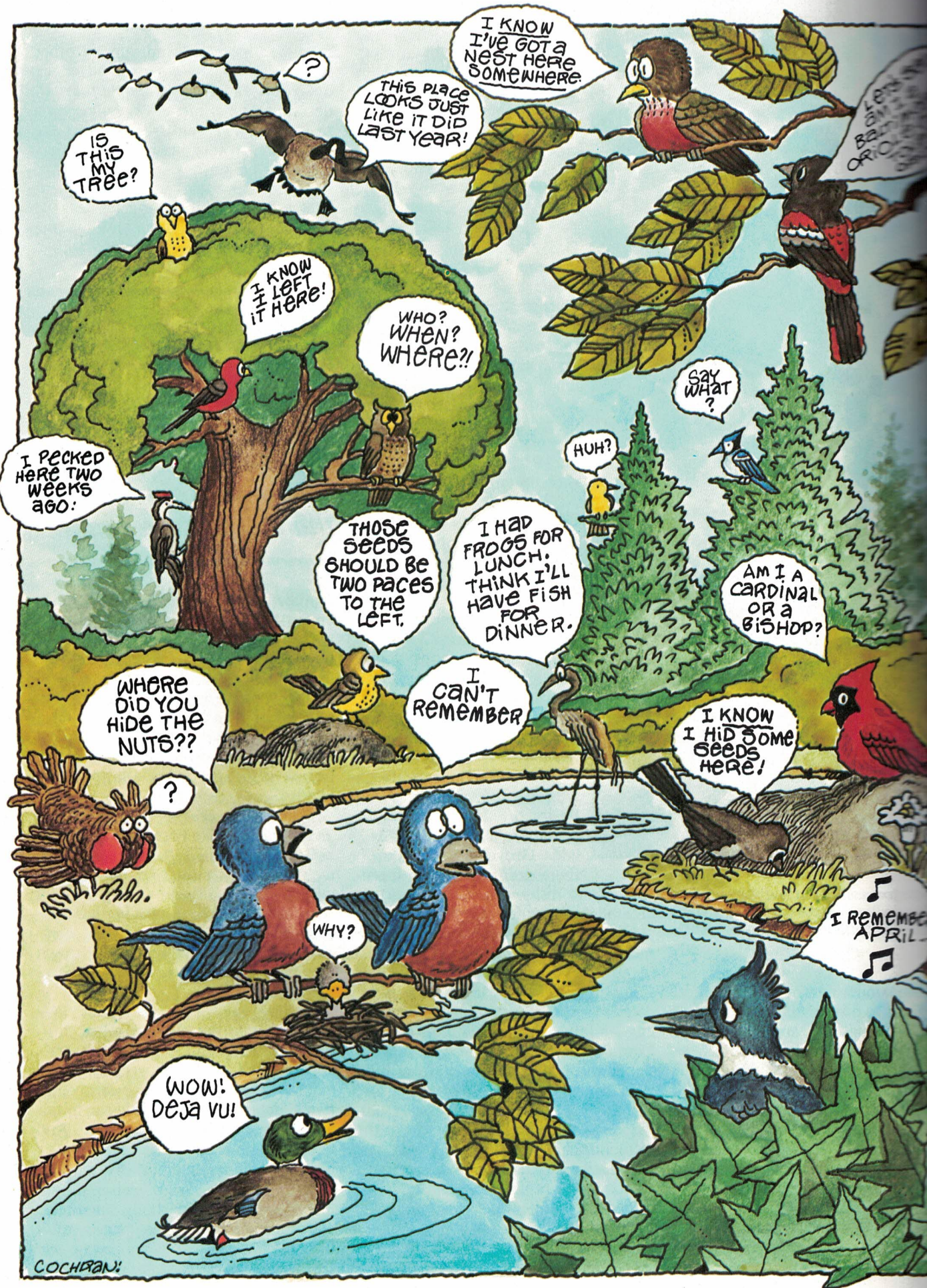
"Believe me," says Groveman. "We don't want to put anyone out of business. In fact, I think it's to industry's advantage to support efforts like ours all across the country because companies that violate the law are gaining an unfair advantage over their competition. And what's worse, they're violating our basic right to clean air and clean water." ■

Managing Editor Mark Wexler interviewed members of the Toxic Waste Strike Force last winter in Los Angeles.

there are tremendous incentives to be dishonest," says Barry Groveman. "We're trying to create incentives for being honest."

Peairs was under contract with a number of firms to dispose of their chemical wastes. Through an anonymous tip, Groveman learned that Peairs was merely discharging those wastes into the city's sewer system. After carefully monitoring that system, the team prepared to strike.

"We uncovered their scheme and obtained a search warrant," says Groveman. Twenty people participated in the raid. Police officers secured the area, then strike force members went to work. They examined everything in the



Do Birds Have a Memory?

Our feathered friends may be smarter than we thought

By Peter Steinhart
Illustrations by Bruce Cochran



RUSSELL BALDA, a Northern Arizona University biologist, and Alan Kamil, a University of Massachusetts psychologist, have sent a bird to do a man's work. They have placed a Clark's nutcracker named Burkholdter in a windowless room and asked him to chew off his memory. They, like a number of other researchers, are trying to determine if science has underrated the intelligence of birds.

Burkholdter flutters across the room and perches on a rock on the floor. He cocks his head and looks around. The chamber walls are gray and featureless. The plywood floor, also gray, has 180 holes arranged in numbered rows. In each hole is a sand-filled Dixie cup, its top flush with the floor. Four of those cups hold pinyon nuts which Burkholdter had buried the previous day. After recording the location of Burkholdter's caches, Balda removed the bird from the room and has not fed him since. Now Burkholdter is back and looking for his pinyon nuts. He is no scholar. Apparently birds, like people, vary in attentiveness. Colleen, another nutcracker that was tested a few minutes earlier, recovered three nuts from three different caches without probing a single wrong cup. But Burkholdter digs into four cups before he uncovers a nut. Then he scythes into 17 other cups, shoveling sand right and left onto the floor before he hits his second cache. He moves from hole to hole, up the row and down another, scooping sand onto the floor. He seems to know there are some nuts stashed here, but he doesn't seem to remember exactly where. Kamil, who now watches through a one-way window, tugs at his graying beard and lowers his thick black eyebrows. He snorts impatiently, "Stop and think, boy!"

It's both a joke and an honest urging. Memory is a part of thinking. And we don't consider birds to be thinkers. Our

language impugns them with expressions like "featherheaded" and "birdbrain." "Birds are believed to have no memory," says Balda. "Most animal behaviorists will tell you that a bird's major way of getting through life is instinct." That is, birds are thought to have no recollection of past results or foresight of future consequences; they simply respond to events in rigidly programmed ways. For example, a robin hops across the lawn, cocks its head and listens, and the wiggling of a worm underfoot triggers in the bird a desire to

peck. The conventional view is that the robin doesn't *know* it is looking for worms, but that unconscious motor patterns push it into enough random encounters with worms that it doesn't starve.

That notion derives in part from an old view of the brain. Early anatomists observed that bird and mammal brains are different. Bird brains are smaller; the largest is about the size of a small cat's brain. And bird brains are built differently. While mammals have six layers of cerebral cortex stacked on the surfaces of their brains, birds have only three. It is this neocortex that we believe gives mammals their greater intelligence. The conventional view is that birds did not develop extra cortical layers because the larger brain, and the muscles needed to support it, would weigh birds down and prevent them from flying.

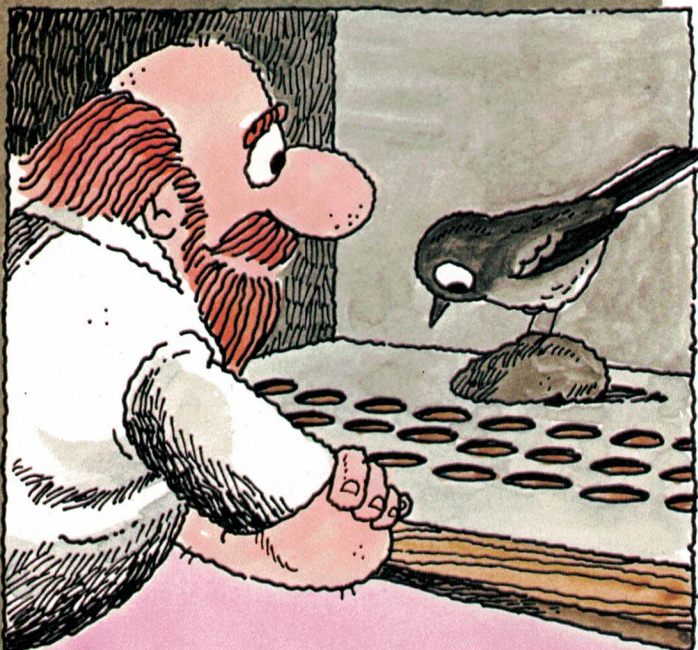
Recent research, however, is changing the old view of bird intelligence. Work by Harvey Karten, a neuroanatomist at the State University of New York, and others, suggests that bird brains are not as limited as we once thought. The researchers have found that the embryonic cells which give rise to the neocortex in mammals give rise to the hyperstriatum in birds. Karten showed that the cells of the hyperstriatum have the same chemistry and transmit the same impulse that cortical

cells do—and cortical cells are assumed to be the seat of learning in mammals. "The avian brain contains distinct cell populations which directly correlate to the cell populations found within the mammalian brain," says the scientist. "I don't think there is any evidence that birds are any less intelligent than mammals."

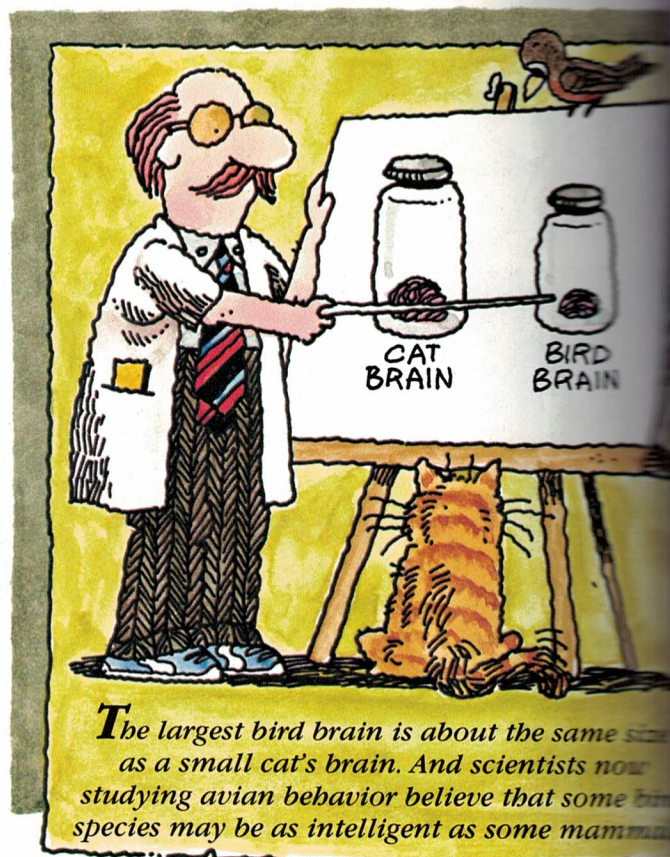
While neuroanatomists have been developing a new view of the bird brain, biologists in the field have developed some new notions about bird behavior. "A lot of recent work is showing that learning and memory play a very important role in the way birds behave," says Kamil. The big change leading to this new point of view is the recognition in the field of individual birds. Researchers are now frequently color banding birds so that they can recognize individuals and follow them for long periods of time. "It became clear to me that individuals were very different in terms of the ways they responded to environmental conditions," notes Balda. "They were clearly recognizing each other. They were also communicating to each other. Their responses to predators and men seemed to be individualized." In short, observes the scientist, the birds' actions seemed not to be instinctive, but intelligent.

For example, Balda once removed a female pinyon jay from a wild flock, in effect widowing her lifelong mate. The male eventually found a new mate and then started a new family. Six weeks later, Balda put the original female back. "We had an incredible love triangle," he recalls. "She proceeded for ten days to harass the male and beg food from him. She literally made life so miserable for the male that he gave up the other mate."

Balda thought at times the birds might even be calculating.



The nutcracker seemed to know he had some nuts stored in the cups, but he couldn't remember exactly where. Researcher Kamil, watching through a window, snorted: "Stop and think, boy!"



The largest bird brain is about the same size as a small cat's brain. And scientists now studying avian behavior believe that some bird species may be as intelligent as some mammals.

He had seen nutcrackers in the wild pair up to raid the pine cone middens of red squirrels. One nutcracker would lure a squirrel away from the pile while another darted in to seize the cone. If the squirrel pursued one thief, then the other would rush in for the cone.

Science, however, places little faith in anecdotes about birds and nutcrackers. It seeks quantitative studies and observations that can be interpreted uniformly by whoever examines them. For this reason, Kamil did quantitative field studies on the foraging behavior of a small bird called the kihi, a Hawaiian honeycreeper. He found that individually marked birds did not attempt to revisit flowers that they had already searched for nectar, even though the earlier visits seemed no way to mark or alter the flowers. That seemed to the biologist to be some evidence of memory.

But how do scientists show such things are memory? "A lot of times when people think of animals knowing this or that, there are simpler explanations," says Balda. For example, squirrels bury walnuts for later use. But new studies suggest that the creatures tend more often than not to recover the caches of other squirrels, and that they won't dig into one of their own hiding places if a researcher has already gone in and removed the walnut. Therefore seems pretty clear to most researchers that squirrels smell their caches and do not remember them. "Psychologists tend to reserve the word 'memory' for conditions where the context keeps changing," says Kamil. "Like telephone numbers. There are a lot of new telephone numbers and humans tend to remember them."

By designing experiments which offer changing conditions, scientists are finding new evidence of memory in animals. Food storage, for instance, offers a good opportunity to examine

memory in birds. Many birds cache food. Acorn woodpeckers wedge thousands of acorns into shallow holes drilled in a single oak or pine. Pinyon jays have evolved long bills and a capacity to carry seeds in their throats. Each species has evolved different storing habits, and each must remember different things.

Balda was intrigued with this caching behavior seven years ago when he captured a Eurasian nutcracker in West Germany. He wondered: did nutcrackers rely on memory? Did they rely on smell, which is poorly developed in birds? Or was it simply a lucky response to a lot of blind probes?

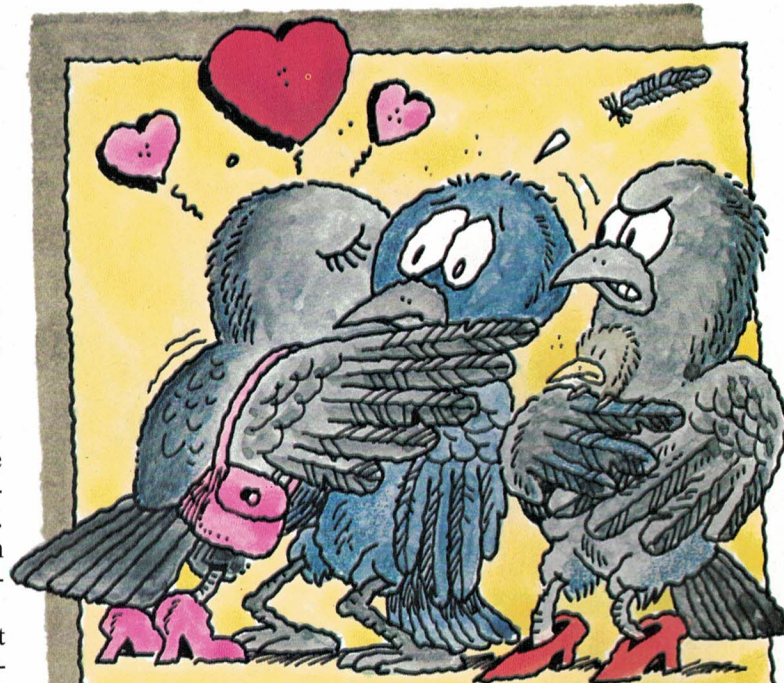
To find out, Balda brought the caching behavior indoors. He covered a laboratory floor with sand, let Hans, the captive nutcracker, eat seeds until his hunger was satisfied, and then watched him cache the remaining seeds. He removed Hans from the laboratory for a few days and then returned him to the room to see whether or not he remembered where he had stored the food.

Hans was very accurate at recovering seeds, even without marking caches with twigs or pebbles, as Clark's nutcrackers often do. Hans also had a long memory: after 18 days, he recovered seeds with 92 percent accuracy. Even when the seeds were removed and the sand raked, Hans dug in the right places, indicating that smell wasn't guiding him. And subsequent studies by graduate students with Clark's nutcrackers showed that 80 percent of their caches were recovered by the bird that made them, even though other birds were present. That seemed to the researchers that there was strong evidence that the recovery of caches by nutcrackers wasn't random.

Balda felt that in trying to go beyond behavioral studies to



Biologist Russell Balda once saw a pair of nutcrackers team up on a squirrel. While one bird flew in to distract the squirrel, the other raided the animal's store of nuts.



When a female jay was removed from her mate, he soon found a replacement. When the original female returned, she made the male's life so miserable he gave up his second "spouse."

understand the mechanisms of memory, he was getting outside of his training. So he joined forces with Kamil, a psychologist. It is an unusual partnership. Psychologists seldom engage in evolutionary studies, and biologists seldom try to measure intelligence.

But it is also a promising partnership. For if Balda and Kamil demonstrate that birds remember, they will have shown that learning and memory evolved in at least two groups of animals—birds and mammals. That may give us a variety of brains to compare to our own. And finding other intelligences to compare to our own may lead to a new understanding of the human mind.

The work on bird memory could, in the long run, help us to find ways to improve our own memory skills or to deal with the loss of memory that comes to most of us with old age. But Balda and Kamil are quick to caution that understanding the human brain is not the immediate focus of their work. "We shouldn't be comparing animals to humans here," says Balda, "because natural selection has produced in birds a different kind of brain for storing different kinds of information."

However, by developing better understanding of how birds think, we may change the way we think of them. Since humans tend to take an interest in other species in direct proportion to the amount of intelligence they believe the other species to possess, crediting birds with greater skills in learning and memory may ultimately make us more respectful and more appreciative of them. "That really," says Kamil, "is the purpose behind all of the research."

Californian Peter Steinhart wrote about humpback whale research in the April-May issue.

Where BEACH MASTERS Reign

*For an intrepid journalist,
sharing an Alaskan island with
10,000 breeding sea lions
was an unforgettable experience*

Story and photographs by Fred Bruemmer

FAR beneath me at the base of a cliff, the beach was covered with a broad band of sea lions. Their coats glimmered golden brown in the morning sun, and their roars overwhelmed the sound of pounding surf. Even from my distant vantage point, I could tell by the creatures' enormous size that they were Steller sea lions—the animals I had traveled to remote Marmot Island to observe. Of the world's five sea lion species, Stellers are the biggest; some of the bulls below measured 13 feet in length and weighed more than 2,000 pounds.

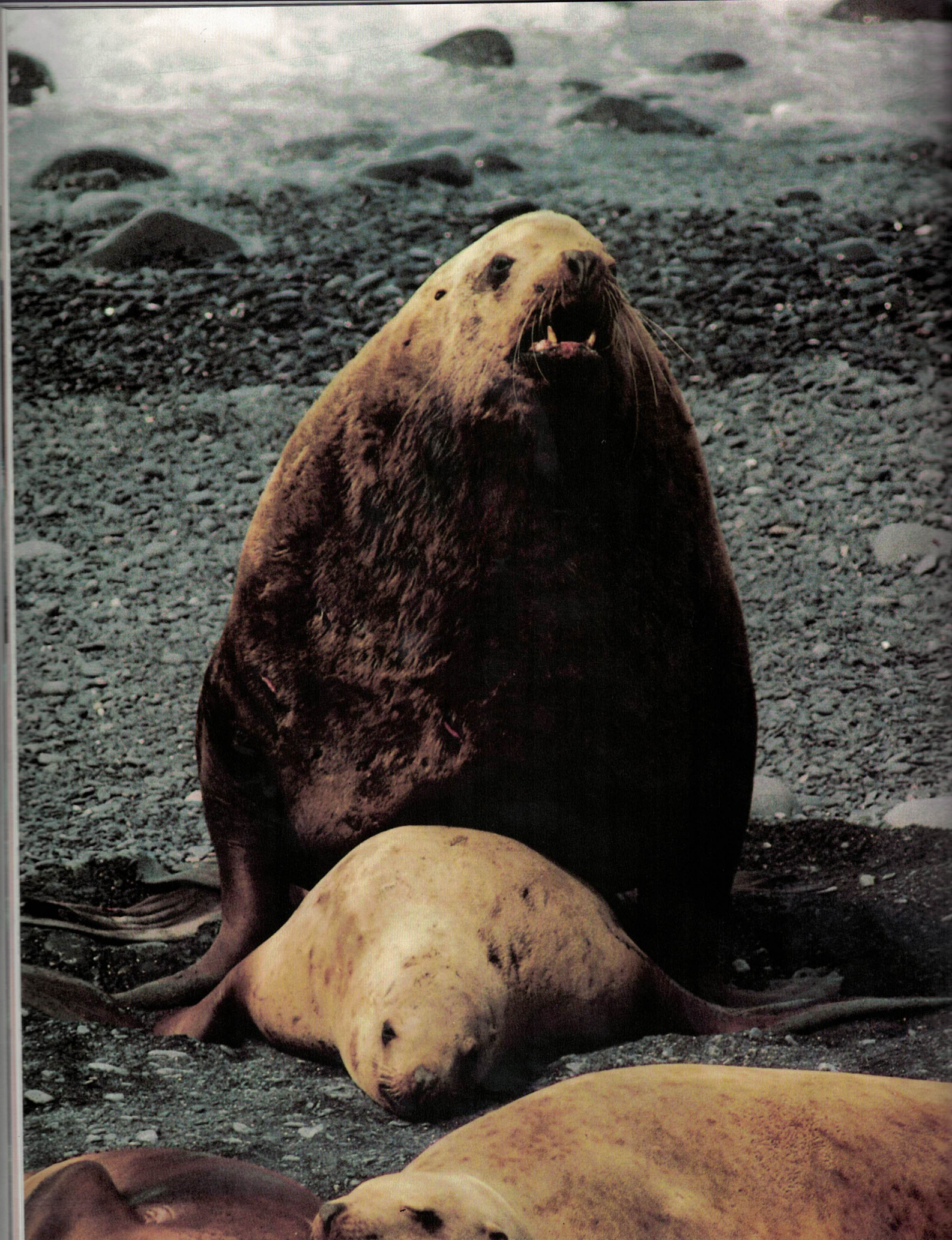
Marmot Island has the largest Steller colony in the Gulf of Alaska—the broad bay that rims the southeastern corner of the state. During spring and summer, more than 10,000 animals mass on seven of the island's beaches to breed. Six of those beaches are rookeries where dominant males maintain their harems, and where more than 5,000 pups are born each year. The seventh is a "bachelor beach." There young males joust, practicing for their future role as lords of the beach, and old bulls, defeated in battle, sleep in quiet resignation on the black sand.

Not long ago, when the invasion of sea lions arrived on Marmot Island, I was there to meet it. I wanted to spend the season with the massive creatures, watching the ancient, complex rituals that rule their lives. By the time my three-

Blanketing the beach in brown, Steller sea lions congregate by the thousands on one of Marmot Island's four breeding sites off Alaska. The colony is actually made up of a series of distinct territories, each ruled by a bull called a "beachmaster."







A dominant bull mates with one of the females in his harem (left). Breeding season can take its toll on the bulls. For several weeks, they will fight and mate frequently but rarely rest or eat.

Scram! A female sea lion gives a rough rebuff to another animal's pup (below). Though protective of their own offspring, Steller females are often hostile toward other youngsters in the colony.



month visit had come to a close, I had gained some understanding of the complicated family life of this little known and much maligned creature.

The Steller, or northern, sea lion was the first described by Georg Wilhelm Steller, a scientist who was traveling with the Russian expedition that discovered Alaska in the 1740s. The animal's range is immense. It stretches in a vast arc from Hokkaido in northern Japan, the Kuril Islands and part of Siberia, to the Aleutians and the south along the coasts of Alaska, British Columbia and Oregon, all the way to California's Channel Islands.

Traditionally, sea lions and fur seals played a vital role in the lives of the natives that lived on or near the rainswept, rocky islands in the Gulf of Alaska. The Aleuts clubbed the animals on the beaches, harpooned them at sea and shot them with arrows smeared with a deadly poison called aconite, taken from the roots of the monkshood plant.

The natives used every part of their prey. They ate the Steller's meat and fat, and rendered its blubber into oil that burned in their stone lamps. The animal's hide was cut into harpoon lines; its teeth were carved into pendants and fishhooks. From the sea lion's stomach, the Aleuts made containers to store dried salmon and meat; from its

esophagus, they fashioned waterproof pants and boots, using dried sea lion sinew as thread.

In the 1800s, when commercial sealers began venturing into Alaskan waters, the sea lions were usually spared from their harvests. Unlike fur seals, the Steller's coarse-haired skin had little value to most sealers. In other parts of their range, however, the animals soon became an object of hatred. The reason: many fishermen claimed that the Stellers were devouring huge quantities of commercially valuable fish.

In Oregon, authorities once paid a \$10 bounty for each sea lion killed. Along the coast of British Columbia, reported Canadian naturalist Ian MacAskie, nearly two-thirds of the province's 12,000 sea lions were killed over a number of years. Since 1972, however, the Marine Mammal Protection Act has safeguarded the animals in U.S. waters, and as a result, their numbers are flourishing again in many areas.

On Marmot Island, the breeding season for Stellers begins in May. The bulls are the first to arrive at their ancestral mating beaches, often claiming the same territories they held the previous year. Apparently, when the females arrive two weeks later, they are attracted to a particular plot of land rather than an individual male. As a result, the bulls vie ferociously for those beach areas that they know, either intuitively or

from past experience, will be most popular with the colony's females.

Time and time again, I watched as the bulky bulls would rear up like angry stallions, glare and roar, and then slash and parry with astonishing speed. Some of them collided chest-to-chest, then heaved like mighty sumo wrestlers, attempting by sheer weight to bulldoze their rivals off the desired property. Once territorial boundaries were firmly established, fighting usually ceased. Neighboring bulls rarely trespassed into another animal's domain, and for good reason.

Too much fighting would dangerously weaken the great bulls. As it is, they are subjected to enormous stress. For about 60 days, during the breeding season on Marmot, they remained rooted to their territories. They neither ate nor drank, but fought or threatened each other frequently and mated often. They rarely rested.

Being "beachmaster," as ruling bulls are called, may have its rewards but it is extremely strenuous. The bulls arrived glossy-furred, sleek, fat and potent and left two months later scruffy, lean and spent. Few bulls have the power and stamina necessary to acquire and hold territory before they are eight or nine years old and most are past their prime by their twelfth year.

One day at Marmot, a bull came in from the sea long after the beach had been divided into territories. He dodged past seaside males, trampled across masses of loudly protesting females and attacked a bull situated near my observation ledge. I had noticed that such interlopers were invariably defeated by resident males. This time however, it was different.

The newcomer grabbed the resident by the neck with such vicious fury that one of his great, yellowish canines snapped off. Soon both bulls were bleeding from jagged gashes on their chests and necks. They wheezed and snorted and panted, victims of their thick blubber, which insulates them and inhibits dissipation of excess body heat.

Soon, two neighbors joined the fray, hacking into the rear of the resident. He spun and slashed at his tormentors. But his strength ebbed fast and his core temperature must have been dangerously high. He wheeled and fled, running a gauntlet of hostile bulls who

tore into him as he passed. He reached the sea exhausted and slumped into the cooling surf.

Like the males, the females insisted on hierarchical spacing after arriving at Marmot. Certain areas had top appeal and there many of the older cows congregated. Those of lower social standing, usually young and inexperienced cows, had to be content with less desirable locations. More than a fourth of the females were accompanied by last year's pups, now feisty 150-pounders that seemed to consider the crowded beach as their playground.

A few days after their arrival at the rookeries, the females bore their pups—large-headed, long-flipper, spindly bodied creatures that weighed about 40 pounds at birth. Their initiation into this world tended to be rough. A female would sniff her pup intently as it emerged, then she would grab it, lift it two or three feet high and let it drop upon the rocks. It's apparently the sea lion equivalent of a slap upon a human baby's bottom. On one occasion, a scientist observed a female pick up and drop her newborn pup 52 times in a row.

A few such drops are usually enough to make the youngster bawl and crawl, and from this instant on the female will recognize her pup among all the hundreds of other pups by its distinctive voice and smell. This vital bond established, the pup searches awkwardly but urgently for its mother's nipples. The female usually guides it in the right direction with her flippers. The pup suckles greedily, switching often from nipple to nipple, then, sated and exhausted, falls asleep. It is barely a half-hour old.

Later, when surviving pups roam the rookery, gangs of yearlings acting like beach bullies may pester them. They push and nip at the youngsters, but rarely do serious damage.

I saw some pups squashed by bulls. To the mighty males, the pups seemed not to exist at all. If one happened to be in a bull's path, the gigantic male simply steamrolled over it. However, the pups seemed quite aware of this danger and flippered frantically out of the way when the local lord came galumphing across his territory.

Strangely enough, one of the greatest threats to the pups are the females. Most are devotedly maternal to their own pups but they can be viciously aggres-

A mother sea lion identifies her pup by smell. The bond between parent and offspring is formed at birth and lasts into the youngster's second year, when the pup returns to Marmot as a juvenile.

sive toward all other pups. Females know their offspring by voice and smell, but initially, the pups do not recognize their mothers. Several times each day I saw a pup approach the wrong females, yearning for protection and milk. Often, the female would sniff the alien pup, then grab the youngster and toss it high into the air.

By far the most dangerous animals in a rookery were the females whose pups had died. They roamed the beach, seeking and calling and rushing eagerly towards any unattended pups. Then, in tragic fury, they mauled the infants, sometimes with fatal results. About ten percent of all pups died.

In seven weeks the pups doubled their weight. About ten days after a pup was born, the mother mated, usually with the bull who reigned over her area of beach. Her foraging expeditions became longer. The pups slept a lot, often in what researchers call "pup pods"—dense clusters located away from most potentially dangerous adults. And the pups explored. The sea fascinated them yet seemingly filled them with fear. They frolicked in the surf, then scampered frantically for higher ground when a great breaker swished up the beach.

When the pups were about a month old, the females urged them to swim. They called and coaxed, but the pups were loathe to venture beyond wading depth. In deeper water they seemed to panic, thrashing and floundering and trying desperately to hang onto their mothers. Finally, they got their long flippers coordinated and discovered they really could swim. From that moment on, they were as one with the sea.

The worn and battered bulls departed. Females and pups swam out to sea, the young now nearly as swift and graceful as their mothers. After three months of sound and fury the great rookeries were quiet—until the next year, when the sea lions would return to Marmot Island to battle and breed again upon their ancestral beaches. ■

Canadian journalist Fred Bruemmer specializes in the wildlife and native peoples of the Far North.





WITHDRAWAL SHEET

Ronald Reagan Library

Collection Name

DEAVER, MICHAEL: FILES

Withdrawer

KDB 7/29/2011

File Folder

MAY 1985 INCOMING AND OUTGOING (2)

FOIA

F97-0066/19

COHEN, D

Box Number

27

64

<i>DOC Document Type</i>	<i>No of</i>	<i>Doc Date</i>	<i>Restric-</i>
<i>NO Document Description</i>	<i>pages</i>		<i>tions</i>
1 FORM	1	ND	B6
TRAVEL VOUCHER (PARTIAL OF FRONT)			

Freedom of Information Act - [5 U.S.C. 552(b)]

- B-1 National security classified information [(b)(1) of the FOIA]
- B-2 Release would disclose internal personnel rules and practices of an agency [(b)(2) of the FOIA]
- B-3 Release would violate a Federal statute [(b)(3) of the FOIA]
- B-4 Release would disclose trade secrets or confidential or financial information [(b)(4) of the FOIA]
- B-6 Release would constitute a clearly unwarranted invasion of personal privacy [(b)(6) of the FOIA]
- B-7 Release would disclose information compiled for law enforcement purposes [(b)(7) of the FOIA]
- B-8 Release would disclose information concerning the regulation of financial institutions [(b)(8) of the FOIA]
- B-9 Release would disclose geological or geophysical information concerning wells [(b)(9) of the FOIA]

C. Closed in accordance with restrictions contained in donor's deed of gift.

TRAVEL VOUCHER (Read the Privacy Act Statement on the back)		1. DEPARTMENT OR ESTABLISHMENT, BUREAU DIVISION OR OFFICE		2. TYPE OF TRAVEL ☐ TEMPORARY DUTY ☐ PERMANENT CHANGE OF STATION		3. VOUCHER NO.	
TRAVELER (PAYEE)	5. a. NAME (Last, first, middle initial) Deaver, Michael K. b(6)			b. SOCIAL SECURITY NO. 		4. SCHEDULE NO.	
	c. MAILING ADDRESS (Include ZIP Code) The White House Washington, DC 20500			d. OFFICE TELEPHONE NO. 456-6475		6. PERIOD OF TRAVEL a. FROM b. TO	
	e. PRESENT DUTY STATION The White House		f. RESIDENCE (City and State) 4521 Dexter Street, NW Washington, DC 20007		7. TRAVEL AUTHORIZATION a. NUMBER(S) b. DATE(S)		
	10. CHECK NO.						
8. TRAVEL ADVANCE a. Outstanding b. Amount to be applied c. Amount due Government (Attached: ☐ Check ☐ Cash) d. Balance outstanding				9. CASH PAYMENT RECEIPT a. DATE RECEIVED b. AMOUNT RECEIVED \$ c. PAYEE'S SIGNATURE		11. PAID BY	
12. GOVERNMENT TRANSPORTATION REQUESTS, OR TRANSPORTATION TICKETS, IF PURCHASED WITH CASH (List by number below and attach passenger coupon; if cash is used show claim on reverse side.)							
I hereby assign to the United States any right I may have against any parties in connection with reimbursable transportation charges described below, purchased under cash payment procedures (FPMR 101-7) ▶ Traveler's Initials							
AGENT'S VALUATION OF TICKET (a)		ISSUING CAR-RIER (Initials) (b)	MODE, CLASS OF SERVICE AND ACCOMMODATIONS (c)	DATE ISSUED (d)	POINTS OF TRAVEL		
					FROM (e)	TO (f)	
Gov. Tran.s					Washington, DC Los Angeles, CA	Los Angeles, CA Santa Barbara, CA	
Private Trans.					SB, CA Los Angeles, CA	To Los Angeles Washington, DC	

13. I certify that this voucher is true and correct to the best of my knowledge and belief, and that payment or credit has not been received by me. When applicable, per diem claimed is based on the average cost of lodging incurred during the period covered by this voucher.

TRAVELER SIGN HERE *Insulman* DATE _____ AMOUNT CLAIMED \$ 52.50

NOTE: Expense account works a forfeiture of claim (28 U.S.C. 2514) and may result in a fine of not more than \$1000 or both (18 U.S.C. 287; i.d. 1001).

14. **TREASURY**
BUREAU OF GOVERNMENT FINANCIAL OPERATIONS

DO NOT FOLD, SPINDLE OR MUTILATE
KNOW YOUR ENDORSE... REQUIRE IDENTIFICATION



PAY TO THE ORDER OF
MICHAEL K DEAYER

MONTH DAY YEAR
04 30 85

11010001

T/A 4824

WASHINGTON, D. C.

United States Treasury

15-51 000

Check No. 20,516,276

SYMBOL 3005

DOLLARS CTS.
\$ 52 50

WHITE HOUSE
V046WH

052

Joe O'Brien

50

50

11 30052 11

000000051A

(-77)

SCHEDULE OF EXPENSES AND AMOUNTS CLAIMED

INSTRUCTIONS TO TRAVELER (Unlisted items are self-explanatory)

Col. (c) If the voucher includes per diem allowances for members of employee's immediate family, show members' names, ages, and relationship to employee and marital status of children (unless information is shown on the travel authorization.)

Col. (d) Show amount incurred for each meal, including tax and tips, and daily total meal cost.

Col. (e) Show expenses, such as laundry, cleaning and pressing of clothes, tips to bellboys, porters, etc. (other than for meals).

Col. (f) Complete for per diem and actual expense travel.

Col. (g) Show total subsistence expense incurred for actual expense travel.

Col. (h) Show per diem amount, limited to maximum rate, or if travel on actual expense, show the lesser of the amount from col. (f) or maximum rate.

Col. (i) Show expenses, such as taxi/limousine fares, air fare (if purchased with cash), local or long distance telephone calls for Government business, car rental, relocation other than subsistence, etc.

Complete this information if this is a continuation sheet. **PAGE 2 OF 1 PAGES**

TRAVELER'S LAST NAME
DEAVER

TRAVEL AUTHORIZATION NO.

DATE	TIME (Hour and am/pm)	DESCRIPTION (Departure/arrival city, per diem computation, or other explanations of expense)	ITEMIZED SUBSISTENCE EXPENSES						MILEAGE RATE: NO. OF MILES (k)	AMOUNT CLAIMED							
			BREAK-FAST (d)	LUNCH (e)	DINNER (f)	TOTAL (g)	MISCELLANEOUS SUBSISTENCE (h)	LODGING (i)		TOTAL SUBSISTENCE EXPENSE (j)	MILEAGE (l)	SUBSISTENCE (m)	OTHER (n)				
4/5	9:00 AM	Andrew AFB															
4/5		Santa Barbara, CA															
4/6	2:00 PM	Dpt. Los Angeles, CA															
4/6	8:05 PM	Arr. Washington, DC															
												SUBTOTALS					
												TOTALS					

If additional space is required, continue on another SF 1012-A BACK, leaving the front blank.

In compliance with the Privacy Act of 1974, the following information is provided: Solicitation of the information on this form is authorized by 5 U.S.C. Chap. 57 as implemented by the Federal Travel Regulations (FPMR 101-7), E.O. 11609 of July 22, 1971, E.O. 11012 of March 27, 1962, E.O. 9397 of November 22, 1943, and 26 U.S.C. 6011(b) and 6109. The primary purpose of the requested information is to determine payment or reimbursement to eligible individuals for allowable travel and/or relocation expenses incurred under appropriate administrative authorization and to record and maintain costs of such reimbursements to the Government. The information in the used by officers and employees who have a need for the information in the performance of their official duties. The information may be disclosed to appropriate Federal, State, local, or foreign agencies, when relevant to civil

Enter grand total of columns (l), (m) and (n), below and in item 13 on the front of this form.

TOTAL AMOUNT CLAIMED

THE WHITE HOUSE OFFICE
OFFICIAL TRAVEL AUTHORIZATION

No. 4824

Date of Request April 1, 1985

TRAVELER TO COMPLETE SECTIONS 1-8.)

1. TRAVELER

Name: Michael K. Deaver ☒ White House Staff

Extension: 6475 Room: WW ☐ Other _____

2. PURPOSE(S) and DATE(S): To accompany the President, 4/5/85 - 4/6/85

3. ITINERARY Washington, DC to Santa Barbara and return to Wash. DC
(List all cities where stopover occurs.)

4. DEPARTURE:

Date: April 5, 1985

Time: approx. 9:00 AM

Mode: Gov. Transportation

RETURN:

Date: April 6, 1985

Time: Arr. 8:05 PM

Mode: American Flight #36

(first Class)

5. NATURE: ☒ 100% Official ☐ 100% Political

SIGNATURES:

Traveler: [Signature]
(I have read and agree to the terms set forth on the reverse side)

[Signature]
Department Head

[Signature]
Approving Officer
(Special Assistant to the President for Administration)

7. ESTIMATED COSTS:

No. of Days Per Diem _____

Hotel Name _____

Hotel Daily Rate \$ _____

Other _____

SPECIAL EXPENSES:

☐ Registration Fee of \$ _____

☐ Commercial Car Rental

☐ Excess Baggage

☐ Other _____

8. TRAVEL ADVANCE REQUESTED: ☐ YES ☐ No Amount: \$ _____

Signature of Recipient: _____ Date: _____

REPAID: Amount _____ Date _____ Schedule _____ Balance this trip _____

FOR TRANSPORTATION OFFICE USE ONLY: 001 5408 192 016

GTR No. 07-583-641 Amount \$ 186.⁰⁰

103 #950 P011

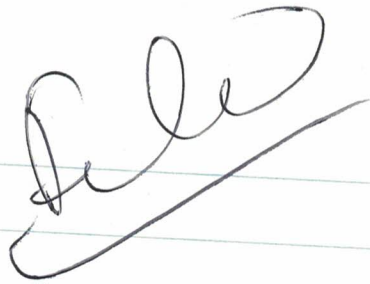
(8/13/81)

VOUCHER WORKSHEET			TRAVELER'S NAME <i>Michael Seaver</i>					AUTH. NO. <i>4824</i>
DATE	PER DIEM	BREAKFAST	LUNCH	DINNER	MISC. SUB.	BILLED HOTEL	DAILY TOTAL	NOTES
<i>4/5</i>	<i>22.50</i>					<i>4/19 hotel bill not in</i>		
<i>4/6</i>	<i>30.00</i>							

<i>13/4</i>	#days	less hotel if billed		<u>Object Codes</u> 23 or 24
<i>30.00</i>	rate	grand total subsistence		
<i>52.50</i>	amount			
	less incidentals on hotel			

Other expenses

Air/rail fare		21
Local trans (list dates and amounts)		25
Auto Rent - (excludes insurance) \$ _____		26
Other travel (specify)		29
Phone calls - Certified as official business ()		52
Other misc. (specify)		
TOTAL	<i>52.50</i>	



1753 -65 st

Bklyn NY 11209

May 1, 1985

Dear Mr. Dole,

If you were the one who convinced the Pres to go to Bitsburg you sure deserve a special Medal for service to the Pres. This Bitsburg ~~after~~ affair has brought out the determination of the Pres. In the second debate vs Mondale he did it his way & won hands down. In the Bitsburg thing he did it his way & will emerge greater than ever when this orchestrated affair fades back to a molehill from a mountain. This is also a strong message to the Banana Dictator Ortega that he the Pres could say & do "I had it my way" & that way is the American way. The reason for a state of Israel was a haven for Jews all over the world. Now come ^{there} don't go to the land of Milk & Honey and so so long as the U.S. money keeps it so. The Jews who leave Russia how many go to Israel & how many come to the U.S. and the state of Israel needs people most of all.

When the Pres says that the Germans on the grave were ^{also} victims. How can any not be a Nazi for brought up from infancy to manhood with Nazi indoctrination be anything but a Nazi. "Yes they were victims."

The "Full of Sound & Fury" will die down and the Pres you cant your live will emerge bigger than ever

Yours Truly
Eugene J. Avenia

WITHDRAWAL SHEET

Ronald Reagan Library

Collection Name

DEAVER, MICHAEL: FILES

Withdrawer

KDB 7/29/2011

File Folder

MAY 1985 INCOMING AND OUTGOING (2)

FOIA

F97-0066/19

COHEN, D

Box Number

27

64

DOC Document Type

No of Doc Date Restric-
pages tions

NO Document Description

2 LETTER

2 4/23/1985 B6

JOHN LOUGHNEY II TO DEAVER (PAGES 2-3,
PARTIAL)

Freedom of Information Act - [5 U.S.C. 552(b)]

B-1 National security classified information [(b)(1) of the FOIA]

B-2 Release would disclose internal personnel rules and practices of an agency [(b)(2) of the FOIA]

B-3 Release would violate a Federal statute [(b)(3) of the FOIA]

B-4 Release would disclose trade secrets or confidential or financial information [(b)(4) of the FOIA]

B-6 Release would constitute a clearly unwarranted invasion of personal privacy [(b)(6) of the FOIA]

B-7 Release would disclose information compiled for law enforcement purposes [(b)(7) of the FOIA]

B-8 Release would disclose information concerning the regulation of financial institutions [(b)(8) of the FOIA]

B-9 Release would disclose geological or geophysical information concerning wells [(b)(9) of the FOIA]

C. Closed in accordance with restrictions contained in donor's deed of gift.

19 Cobblestone Road
Cherry Hill, N.J., 08003
April 23, 1985

The White House
Washington, D.C.
attn: Mr. Michael Deaver

Dear Mr. Deaver,

Although I am a recently retired Secret Service Agent who has had the pleasure to work with you over the past five or so years on various occasions, there is little likelihood that, considering all of the agents you've met, there'd be any reason to remember me save for one particular occasion.

The purpose of this letter is two-fold. First is the fact that it has been well publicized that you will be leaving the Administration in several weeks and I wanted to personally thank you for both the pleasure of your company and to acknowledge how helpful your presence has been during the various Presidential Advances in which I either participated or served in some capacity. Over the years we agents get to work with a lot of advance men for various political figures. I shall always remember what a gentleman you were and how well events were co-ordinated.

The second reason bears upon the one incident which had rather tragic consequences for all of us who participated, which ironically is the one occasion in which you might vaguely recall my face, if not my name. I refer to visit of Queen Elizabeth II to California and the tragic accident of 3/5/83. I was one of the 8A to 4P shift agents assigned to the Queen's detail and of the three agents who were killed, two, Pat LaBarge and Don Bejcek, were both friends of mine and on my shift.

When the motorcade arrived upon the scene, I had the dubious assignment of leaving the motorcade along with Ed Pollard and attending to the accident investigation and removing the bodies from the car and inventorying their personal effects.

Later that evening I rejoined the shift at the Ahwahnee and on 3/6 (Sunday) had occasion to speak with you and to thank you for the generous assistance you rendered to the widows and families of the deceased. You told me about your previous trips to Yosemite and the personal significance it had for you and you suggested several locations I might want to see in the remaining time we had at the park.

Several weeks later I received a thank you note from you which only served to remind me what a considerate individual you are.

For those of us on the detail and especially those of us who were involved at the accident scene, the memory is still fresh and one which time might lessen, but probably will never completely erase. There is, however, a lot more to the incident than I suspect you are aware of. In the words of Paul Harvey, I'd like to tell you the "rest of the story" which I can attest is almost beyond belief and which might, in some measure, lessen the pain of that incident.

I was assigned to the Philadelphia Office when the request for agents to man the detail was sent out.

b(6) I have always enjoyed the British, probably because Prince Charles and I share the same birthday and also because my first advance involved Queen Elizabeth's visit to the U.S. in 1976. Besides I had several agent friends in California and the trip, especially the visit to Yosemite, was for me a much needed vacation, if you can appreciate that.

Despite the rain and the constantly changing schedules, I really had a wonderful time. I became close friends with Don Bejcek who, ironically, was a last minute replacement because another Chicago agent's child got sick. It was Don's first trip as a shift agent and having been on the job for only two years, his excitement and enthusiasm was infectious. Don had a three year old son, Andrew, and a wife who was several months pregnant. Virtually every night, Don and I went souvenir hunting for presents or mementos of the trip to bring back to our respective children.

On the evening of 3/4, Don and I had dinner and went looking to buy a camera for Don's wife. On the morning of 3/5, Don, Pat and I had breakfast together at the St. Francis before we headed to the pier. When we got to the pier, we were told that because of the additional agents traveling aboard AF26000, two day shift agents would have to travel ahead of the motorcade with the midnighters. By the luck of the draw, Don and Pat were selected, ultimately sealing their fate.

Because we were so close and because I became intimately involved with the gruesome details of the accident itself

and the events at the mortuary; I was probably more affected by their deaths than some of the others.

In the months that followed, my wife and I became close friends of Don's widow, Ellen, who lived in Chicago. Although we had never ^{met} in person, Carol and I became friends with whom Ellen could share her genuine emotions without having to, more or less, live with the consequences.

[REDACTED]

§(6)

While time began to heal Ellen's wounds, my problems worsened when my wife developed a brain tumor and died two months later.

Unaware of Carol's death, Ellen sent Carol and I a Christmas card that year thanking us for all our help and support. Before Carol died, she told me one evening that in the event of her death, she hoped I would date Ellen whom she had come to admire. While the thought was generous, it was the last thing on my mind as I tried to cope with a dying wife and the attendant problems. When I received Ellen's card, I felt obligated to call her one night to inform her of Carol's death. During the conversation, we discussed the respective problems we were having as single parents and the problems our children were still having. I mentioned that I wanted to take my daughter, Elizabeth, away somewhere for several days so we could be alone and away from the house. Ellen mentioned that she and Don had planned to take Andy to Disneyworld when he was 5, but now being alone she was apprehensive about traveling so far away to a place she had never been before. Having been to Disneyworld several times, I suggested that I'd make her travel arrangements and meet her there so that if she had any problems, she'd atleast have someone who knew the area nd be able to point her in the right direction. I was sure Eliz would enjoy a trip to Disneyworld too, so I went ahead with the arrangements. The next day I told Eliz about the pending trip, and to my surprize, she thought it would be a great idea because she could "babysit" Andrew and Ellen and I could have some free time alone.

When I told Ellen about Elizabeth's response, we both got a "kick" out of her reaction...and then something happened...the idea wasn't as childish as we first thought.

To make what has already been a long enough story a bit shorter, we did make the trip to Disneyworld, but as husband and wife as we were married 31 days after that first phone call! Two months ago Ellen delivered our newborn, Erin Michelle.

The only unfortunate part about this story is that while on the John Glenn Detail, I ruptured a disc, had unsuccessful surgery and had to retire from the Service shortly after Erin was born. On the brighter side, however, what was On 3/5/83 an event of extreme tragedy eventually turned out to be a new beginning for both of us. Both Andy and Eliz are doing wonderfully and our friends and families are overjoyed at how well things eventually turned out. I hope someday that the other two widows find similar happiness.

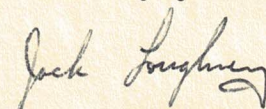
As if our story weren't fantastic enough, there is even a bit more. You may recall several years ago the tragic airplane crash in Cincinnati in which 3 FBI agents were killed. During the memorial service held in D.C. for the widows of all of the federal agents killed in 1983, one of the FBI widows was from Chicago and became one of Ellen's closest friends. She was quite nervous and upset about our sudden marriage. On the other hand, my closest friend and one of the reasons I volunteered for the California trip was to see my closest friend, an agent from San Jose. He, too, was shocked by my rather sudden remarriage. He's divorced and last Thanksgiving we invited both of them to fly to our home for a visit. On June 15th of this year, we are going to be the Best Man and Maid of Honor at their wedding!

Considering all you have on your mind, especially at this time, I apologize for taking up so much of your time with this rather lengthy letter. However, after the accident I spent many months wondering how such a tragedy could occur and how any possible good could ever come from such a sad event. In my career as an agent, it definitely was the lowest point.

Like yourself, I truly loved my job. I enjoyed being an agent so much that I was often embarrassed by the fact that I got paid for doing something I both enjoyed and received so much satisfaction from. The one thing I didn't consider was the effect it had on my family life. The death of my wife and Don taught Ellen and I a new appreciation for life, ourselves and our children. During my absence and now my retirement, I notice that the Secret Service is still functioning quite well despite the lack of my presence. What is more important is the better quality of life I now enjoy and how much better my wife and children are and how much more happy we are than ever before.

Having been a public servant, I can fully appreciate the many personal sacrifices you have made and I truly hope that in your new endeavor you will not only find success which you deserve, but that you also find the happiness of having more time with your family and the good health to enjoy it.

Sincerely yours,



John T. Loughney, II

F.C. Wenceslao & Associates, Inc.
INTERNATIONAL TRADE CONSULTANTS & ANALYSTS

File
April 26, 1985



The Honorable Michael K. Deaver
Deputy Chief of Staff
THE WHITE HOUSE
Washington, D.C. 20500

Dear Mr. Deaver:

I am pleased to send you a copy of my letter to the Editor of The Wall Street Journal in case you didn't come across it.

For some time now I've been thinking that a major cause of the worsening U.S. trade deficit is that the solutions previously resorted to may not have been appropriate. For instance, there is a common misconception that the marketing experience of people catering to domestic needs will suffice for them to tackle export trade. Evidence suggests that most export awareness seminars and workshops are flawed due to such misconception because resource faculties mostly rely on classroom knowledge or macroeconomic perspective dominated by an ethnocentric bias that what works well in the American market is acceptable overseas.

That's why I feel the first step toward the solution of the deficit problem is a deeper look into its underlying causes, not the least of all is how business management courses of American universities and colleges are making an impact on the U.S. trade balance.

Thanks and best regards.

Sincerely yours,

Francisco C. Wenceslao

Francisco C. Wenceslao
Senior Consultant

Enclosure

FCW/ksb



THE WALL STREET JOURNAL MONDAY, APRIL 15, 1985

Letters to the Editor

A 2nd 'Opening of Japan' Might Fail

George Gilder's "Imports Are Not a Problem but a Cure" (editorial page, March 27) is the first rational approach I've read to the worsening trade deficit. Merely bringing down the dollar's value or opening up foreign markets won't help unless the more underlying causes are licked first. Most probably, correcting some policies that impede exports would already negate the disadvantage of the high dollar that dampens demand overseas for American goods.

The conventional wisdom that a lower dollar would cut the export price of U.S. goods, causing foreign demand for cheaper U.S. exports to rise, is good only in theory. It won't rectify inefficiencies and distortions in the American market, such as short supply of goods that are in demand overseas or when domestic demand crowds out foreign demand, which are actually the principal causes of the trade deficit.

A really serious problem is the misconception that the experience from the country's prolonged import-orientation would suffice for export expansion, as if one trained in the import business can simply turn around and be equally competent in export marketing. This is probably the basis of the argument that if only Japan would open up its domestic market for U.S. exports, then the trade deficit would be more manageable. Supposing there are

other sources where similar products can be obtained more advantageously, who will compel Japanese consumers to buy American goods?

Garden Grove, Calif.

* * *

F.C. WENCESLAO

My wife and I, who are members of the Pearl Harbor generation, were speculating about what would have happened to us had the Japanese won the war.

Remembering how they assigned conquered nations to a place in what they euphemistically termed the Greater East Asia Co-Prosperity Sphere, I concluded that we would have been relegated to a Third-World role of sending raw materials to Japan, while they systematically kept our manufactured goods out of their country and dominated our markets for finished goods. Jobs and wealth would thus be transferred from the vanquished to the victor.

No sooner had I uttered these thoughts, than, as they do in the comic strips, the lights came on in both our heads and we cried in unison: "We must have lost the war," because, with the acquiescence of the Reagan administration, that is exactly what is taking place now.

JAMES E. SULLIVAN
Winter Springs, Fla.



UNITED SYNAGOGUE YOUTH
צעירי בתי כנסת המאוחדים
of the United Synagogue of America
155 Fifth Ave., New York, NY 10010/212-533-7800

PRESIDENT
DAVID STERN
דוד ישראל סטערן

882 Edgewater Trail
Atlanta, Georgia 30328
(404) 843-9657

EXECUTIVE VICE PRESIDENT
KENNETH WEINSTOCK
היים שלום וינסטוק

13 La Salle Avenue
Cranford, N.J. 07016
(201) 272-6684

RELIGION/EDUCATION VICE PRESIDENT
MARNIN WEINREB
אלימלך וינר

2801 Lake Street
San Francisco, Ca. 94121
(415) 668-3896

SOCIAL ACTION/
TIKUN OLAM VICE PRESIDENT
DAVID KAYE
דוד אריה קיי

1651 Valecroft Avenue
Westlake Village, Ca. 91361
(818) 889-7067

MEMBERSHIP/KADIMA VICE PRESIDENT
MICHELE HELLER
מירל הלר

5 Eastern Road
Hartsdale, N.Y. 10530
(914) 693-6617

COMMUNICATIONS VICE PRESIDENT
BELINDA MASON
בלומה יהודית מסון

232 Halsey Avenue
Jericho, N.Y. 11753
(516) 681-0253

PAST PRESIDENTS
RABBI PAUL FREEDMAN
ARTHUR PODELL
ARTHUR PESCOE
RABBI GERALD ZELIZER
ALAN KAPLAN
MARTIN DANK
RABBI JAMES LEBEAU
DAVID LISSY
DANNY SIEGEL
PETER GEFFEN
RICHARD HOFFMAN
ALAN MINTZ
RABBI STEPHEN GARFINKEL
OSCAR FRUCHTMAN
RICHIE FINKELSTEIN
DAVID SCHWARTZ
MARC GARY
LARRY BURROWS
JIM KAUFMAN
RICHARD MOLINE
ROBERT LENNICK
RABBI JEFF SEGELMAN
DAVID YOLEN
JEFF SCHOENBERG
DAVID MARCU
JEREMY J. FINGERMAN
BRUCE GORDON
MARK DAVIS
SHRAGA SHERMAN
ERIC WEINSTOCK
DAVID ISRAEL

UNITED SYNAGOGUE
OF AMERICA
MARSHALL WOLKE
President

RABBI BENJAMIN Z. KREITMAN
Executive Vice President

Mr. Michael C. Deaver
The White House
Washington, D. C. 20500

Dear Mr. Deaver:

I am sure you will be as moved as I was when you read the enclosed letter from David Stern, the President of United Synagogue Youth. David, a high school student from Atlanta, Georgia, recently returned from a Jewish Youth Leadership Mission to Poland where he visited the sites of the Warsaw Ghetto and a number of Concentration Camps.

Although we have no illusions of one letter changing the President's plan, we hope you will make every effort to see that the enclosed letter receives the President's personal attention. (It was sent via Express Mail from Atlanta on Tuesday, April 23). David's letter is unique in that it represents the impressions of a young person born long after the horrors of the Holocaust occurred. As I'm sure you will agree, he writes from the heart and one can not help but be affected by the eloquence of what he has to say.

I hope you will give special attention and consideration to his letter. I look forward to hearing from you soon.

Sincerely,

Jules A. Gutin

RABBI PAUL FREEDMAN
Director

JULES A. GUTIN
Assistant Director

MIRJAM MUNDSZTUK-ORBACH
Projects Director

ENID ANISMAN
Kadima Director

KAREN LEGMAN SEGAL
Projects Coordinator

ELLIOT FORCHHEIMER
Activities Coordinator

ERIC SHERBY
Program Coordinator

RABBI STEPHEN GARFINKEL
Educational Consultant



UNITED SYNAGOGUE YOUTH

צעירי בתי כנסת המאוחדים

of the United Synagogue of America
155 Fifth Ave., New York, NY 10010/212-533-7800

April 23, 1985

PRESIDENT

DAVID STERN
דוד ישראל סטירן
882 Edgewater Trail
Atlanta, Georgia 30328
(404) 843-9657

EXECUTIVE VICE PRESIDENT

KENNETH WEINSTOCK
חיים שלום וינסטוק

13 La Salle Avenue
Cranford, N.J. 07016
(201) 272-6684

RELIGION/EDUCATION VICE PRESIDENT

MARNIN WEINREB

אלימלך וינר

2801 Lake Street
San Francisco, Ca. 94121
(415) 668-3896

SOCIAL ACTION/
TIKUN OLAM VICE PRESIDENT

DAVID KAYE

דוד אריה קיי

1651 Valecroft Avenue
Westlake Village, Ca. 91361
(818) 889-7067

MEMBERSHIP/KADIMA VICE PRESIDENT

MICHELE HELLER

מירל הלר

5 Eastern Road
Hartsdale, N.Y. 10530
(914) 693-6617

COMMUNICATIONS VICE PRESIDENT

BELINDA MASON

בלומה יהודית מסון

232 Halsey Avenue
Jericho, N.Y. 11753
(516) 681-0253

PAST PRESIDENTS

RABBI PAUL FREEDMAN

ARTHUR PODELL

ARTHUR PESCOE

RABBI GERALD ZELIZER

ALAN KAPLAN

MARTIN DANK

RABBI JAMES LEBEAU

DAVID LISSY

DANNY SIEGEL

PETER GEFFEN

RICHARD HOFFMAN

ALAN MINTZ

RABBI STEPHEN GARFINKEL

OSCAR FRUCHTMAN

RICHIE FINKELSTEIN

DAVID SCHWARTZ

MARC GARY

LARRY BURROWS

JIM KAUFMAN

RICHARD MOLINE

ROBERT LENNICK

RABBI JEFF SEGELMAN

DAVID YOLEN

JEFF SCHOENBERG

DAVID MARCU

JEREMY J. FINGERMAN

BRUCE GORDON

MARK DAVIS

SHRAGA SHERMAN

ERIC WEINSTOCK

DAVID ISRAEL

UNITED SYNAGOGUE
OF AMERICA

MARSHALL WOLKE

President

RABBI BENJAMIN Z. KREITMAN
Executive Vice President

The President of the United States
Mr. Ronald Reagan
The White House
Washington, D.C.

Dear Mr. President:

I am writing to you out of fear. The fear is that the world will forget what happened to over 10 million human beings during World War II.

This past Monday, I returned from a week long visit to Poland. I went as a representative of United Synagogue Youth along with representatives of other Jewish youth organizations throughout the world. We went to Auschwitz, Majdanek, Treblinka, and the Wrasaw Ghetto. I would like to tell you a little of what I saw and felt and experienced.

When I was told that I would be going to Treblinka, the first thing that came to my mind was a picture that I had seen of the ematiated, dying people after the liberation of one of the camps. I expected to see huge barbed wire fences and horrible accomadations. I mentally prepared myself to see a place where over 350,000 of my people were killed. When I got there, nothing I had done to prepare myself was enough.

The first shock was the fact that there is nothing there. There is absolutely nothing left from the original camp. The only way I could tell at first glance that there had ever been a death camp in that spot was because of the monuments that the Polish government had erected. I began to wander around the camp. I watched the ground as I walked. All along the paths and all along the ground were little white pebbles. I asked our guide what they were. They were bones, he said. Human bones.

I stood by the monument at the center of the camp and began to think. I tried to conceive of what had happened in the place where I standing. I glanced down. I saw something that looked as if it did not belong. I brushed away the small amount of dirt that covered the object and picked it up. I almost screamed. A child's tooth lay helplessly in my hand.

While standing over the sight of a mass human grave (one

RABBI PAUL FREEDMAN
Director

JULES A. GUTIN
Assistant Director

MIRJAM MUNDSZTUK-ORBACH
Projects Director

ENID ANISMAN
Kadima Director

KAREN LEGMAN SEGAL
Projects Coordinator

ELLIOT FORCHHEIMER
Activities Coordinator

ERIC SHERBY
Program Coordinator

RABBI STEPHEN GARFINKEL
Educational Consultant

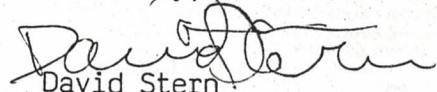
can still see the indentation in the ground where the humans were buried alive as well as dead), I began to understand just where I was. I was in a cemetery. Beneath my feet was not soil, but bones - one piled on top of another. Anywhere I looked, I could see pieces of human beings who were tortured and crushed and finally killed.

Now, in 1985, not a single building, or fence, or wall, or even the smallest reminder that the camp was there remains. Only a monument constructed in my lifetime remains.

It is so much easier to forget. It is so difficult to comprehend the scale of the tragedies that took place that it is easier to deny that they ever took place. THEY DID TAKE PLACE. I saw with my own two eyes the crematorium of Auschwitz, the mass graves of Treblinka, and the pain and suffering of those who managed to survive. Even though Auschwitz still stands (though part is in ruins), the people of Poland have already begun to forget. I saw houses and playgrounds within fifty feet of the barbed wire fences. The main German headquarters at Auschwitz is now a hotel with a restaurant next door. The Polish children ran through the camp as if it was just another historical landmark.

Mr. President, if you visit the Bitburg cemetery which contains the graves of forty-seven SS men, you will begin the road to forgetting the Holocaust. You, as the leader of the American society will lead this country toward a horrible fate. Those who forget history are doomed to repeat it. The United States of America stands for morality and decency. We are a symbol of freedom to the world. We cannot condone the actions of murderers and still remain moral. I ask you, Mr. President, on behalf of the 17,000 Jewish youth in my organization as well as on behalf of all who are moral and upright and good citizens of this country not to visit the graves of those who tried to exterminate an entire people from the face of this earth.

Sincerely,



David Stern
International President
United Synagogue Youth