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Feter Sonet

Nicholson and Brando on the set: Banking on explosive star chemistry

### Back in the Saddle

Two years after his sensational appearance in "Last Tango in Paris," Marlon Brando is back before the cameras, riding the Montana badlands in "The Missouri Breaks," an 1890s Western co-starring Jack Nicholson. Brando and Nicholson get equal billing, but no one splits the screen equally with a legend. "My part's bigger, but Brando's bound to dominste," says the admiring Nicholson. "His mystique is amazing. The ground quaked here for weeks before he arrived."

The day after he arrived on the main location, on rattlesnake-infested hill-sides 15 miles southeast of Billings, Mont., Brando refused to emerge from the seclusion of his luxurious motor home until director Arthur Penn had entered into a "discussion period" with him about his character—an eccentric hired gun contracted by a local rancher to wipe out a band of rustlers. The heated colloquy lasted four hours while the production stood still, potentially costing the \$8 million project delay charges estimated at \$186,000. When the two emerged, Brando had won the right to carry his character further into the risky terrain of madness.

Admiration: The film is the creature of executive producer Elliott Kastner, who commissioned the novelist Thomas McGuane ("Ninety-Two in the Shade"), who lives in Montana, to write an original screenplay. Kastner then baited Penn, Nicholson and Brando into the project with a considerable amount of money and their own mutual admiration for each other's work. "I did it particularly to work with Marlon," says Nicholson. Says Brando: "Arthur and Jack are inventive people. All you have to do is think up

a few inventive moments and you have a movie." Penn completes the circle: "Frankly, what attracted me was the chance to work with these two."

Once the deal was set—Brando got \$1,250,000 and Nicholson \$1 million the script had to be drastically retailored to the two stars. "The picture was scheduled to go within a couple of days," says Penn, "and there was only one scene between these two characters. You get those guys up on the screen, you want to see them go at it."

Superstars: McGuane and Penn closeted themselves with the script during the first two weeks of shooting and emerged with three more confrontations between Brando and Nicholson, who plays the raffish chief rustler. Of his relationship with his two superstars, Penn says: "I keep thinking of myself as a sort of hot walker at the track. Cool 'em down. Walk 'em off after the race. They need to decompress. They also need to gear up. So far it's been fine. They like each other, which is helpful." Says Nicholson, who moved next door to Brando in Los Angeles five years ago, "I haven't seen Marlon socially at all since, he's been here. I try to talk with him during the day. We get along pretty well."

Hardly anyone sees Brando off the set aside from his small entourage, which includes secretary Alice Marchak, her teen-age niece, Mims (who wears a T shirt with the words "Marlon's Go-fer"), personal costumer David Watson and a young studio driver. Brando spends afterhours time alone, teaching himself Morse code, reading about solar energy and tinkering in his mobile home with materials he bought at a Billings hardware store. On that rare visit into town, he wore dark glasses, and when rubbernecking locals

asked, "Isn't that Marlon Brando?" his driver would tersely reply, "No."

Nobody is making extravagant claims for the script of "The Missouri Breaks." Instead, the producers and Penn are hoping that explosive star chemistry will lift this Western above the genre. Brando says that he took the job only because he "went broke" financing experimental sea-farming projects on his private Tahitian island, Tetiaroa. He has been trying to raise sea tortoises for meat and has made generous grants to American and European scientists to analyze Tahiti's ocean currents in connection with his sea-farming projects.

Impact: In a rare interview off the set, Brando was characteristically morose about movies. "It's a disappointment," he says of the social impact of film, "and I'm a disappointment to myself." Instead of talking movies, he uses interviews to advance the cause of the American Indian, which has become his obsession. Having thus far failed to find American financing for his long-projected film, "Wounded Knee," he says he tried to turn "The Missouri Breaks" into a vehicle for the advancement of Indian aims. "My ideas were not met with a great deal of enthusiasm" he adds wrely.

"My ideas were not met with a great deal of enthusiasm," he adds wryly.

"I thank my lucky stars every time I'm in Tahiti, on my own island," he murmurs. "It doesn't matter where you are. You can't escape the depletion of the ozone. You can't build your own citadel." Perhaps, but Brando's performances have always been his own citadel. Even in the worst of his films, his acting has always shown a commitment to his art and the self-confidence to improvise,

Already, he has begun to show just that on "The Missouri Breaks." As the camera rolled the other day, the 235-pound Brando galloped across the broiling range, his silver locks flowing under a brown, flower-bedecked hat. Having mumbled his lines to memorize them, he turned to a passing beauty on horseback and said in a peculiar Irish lilt: "Yer bloomers are showin'." Then, with the gift for improvisation that is unmistakably his own, he leaned forward and put a hand over his horse's ear to shield him from the ungallantry.

-PAUL D. ZIMMERMAN WITH MARTIN KASINDORF IN BRIDGS

### **Guy Fawkes Day**

There is a new brand of thriller that demonstrates with mounting tension how historical events that never took place failed to happen. "The Day of the Jackal," for example, conjured up a bungled attempt on the life of Charles de Gaulle, and in the same mold HENNESSY recounts the story of a fictional character who didn't blow up the House of Lords on the opening day of Parliament.

Because colorful stock footage is used of the Queen herself opening Parliament, the movie is obliged to acknowledge at the start that Elizabeth II and the members of her retinue did not, in fact, willingly cooperate in the making of the

## IINCORPORATING VANITY FAIR) APRIL, 1975 Antenna Accessories Editor Edisalem HERRIGER Pobries Editor Edisalem HERRIGER Pobries Chievestion Associate ELEANORE PRILLIPS Les Angeles Editor SARAH SLAVIN Foshion Augmentis Coordinator Feshion Assistent LAURIE SROCKWAY BODOR Accession, Lingwie

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a stt-down turkey dinner for 225; a buffet for a rousing 1500; get-ready-quick working dinners for the President and at least fifty colleagues; and, of course, numerous State Dinners.

The volume House Thursday, January 30, 1975

Denitrasse

We went to dine "in State" recently (see menu, above right) and fared deliciously. There was an elegant sufficiency (each perfect dish was passed once) and the wines were a joy; all food was American, save the Brie, and both wines were domestic. That's how Mrs. Gerald R. Ford likes it and wants it—and Betty Ford, a woman with deep domestic imagination and a strong sense of economy, is the final word on each detail.

We talked to Mrs. Ford about parties, to Chef Haller and his associates, Assistant Chef Hans Rafferty and Pastry Chef Heinz Bender, to others involved in White House party-planning. We also asked Chef Haller to scale down the State Dinner we ate (124 dined) to a workable-in-your-own kitchen party for eight. For recipes, see below. For photographs and a profusion of party details (preparations and during the occasion), see pages 154-159.

Observation on Mrs. Ford: Her favorite food seems to be fowl—different kinds like capon, duck, squab—'specially for parties. "They are so nice and comparatively inexpensive right now. And they can be made to go a long way. . . . I don't believe in serving large portions."—L.L.

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eight servings

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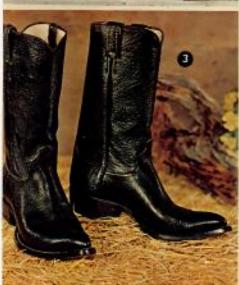
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### BOOTS SHOWN ON FACING PAGE

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12-inch leg with 1%" walking heat. Sizes 9, 45, 244.

12-inch leg with 1%" walking heel. Sizes 8-12, 13A, 7-12, 13, 14B; 6-12, 13, 14D; 6-12E & EE \$89.50 2-0250-29 Russet

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### BOOTS SHOWN ON FACING PAGE

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Califekin tanned" cowhide foot of this fine Lama boot.

13" cowhide leg with 2-rows of contrast stitching that sets off this boot in a hardsome way. Fully leather lined. Narrow loss. 1½" contest riding heels. Sizes 6-12, 8 & D. \$72.50

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SELECT COWNIDE, tarmed to feel as soft as callskin, goes into the making of these fine Lama boots, 13" leg with 3 rows of a "lightening" stitch pattern. Deep scallop tops for comfort. Fully leather lined, Narrow toes, 1%" contest riding heels, Sizes 9-11 B; 7½-11 D. No C.O.D.'s \$72.50 2-0027-25 Treebark Tan

### BOOTS ON THIS PAGE DESCRIBED BELOW

SMART 2-TONE look features a lizard toe overlay that matches the 13" leg. Select cowhide, tenned to be soft and supple but durable. Handsome contrast stitching. Deep scaloped top for comfort. Fully leather lined. Medium round toes. 1½" cowboy heels. Sizes 9-11 B; 7½-11, 12 D. \$78,50 2-0039-29 Bone/Tan
 No C.O.D.s.

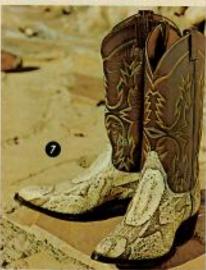
GENUINE BOA, one of the most exotic of all leathers, makes up the foot on this choice Lama style. You'll search far and wide to find a more unique look! Fancy 5-row stitch pattern compliments the 12" kg. Fully leather lined. Narrow round toes. Ity" walking hoets. Sizes 8-11 D. \$120.00 2-0029-23 Natural/Chocolate

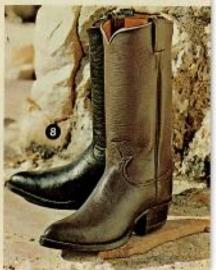
WAGON MASTER, a Tony Lama classic and one of the best setting boots of all time. Genuine water buffelo foot and 12" leg, the leather that's soft and comfortable on your teet, but tough enough to resist scutting. Fully leather lined. Narrow round toes, 11/6" dogger heels, Sizes 9-11 B; 71/6-11 D. \$59,50 2-0920-22 Checolate (Sorry no C.O.D. orders) 2-0020-06 Black

Same as regular Wagon Master but with medium round toes. No C.O.D.'s \$59.50 2-0021-21 Chocolete 2-0099-28 Walnut Tan



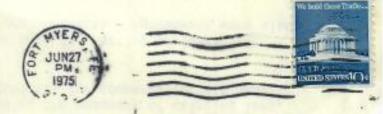






### CARETTA RESEARCH.

P O DRAWER E SANIBEL ISLAND, FLORIDA 33957



Dr. George W. Balaza P.O. Boy 1346 Coconut Island Kaneohe, Hawaii

LOGGERHEAD TURTLE NEWSLETTER

96744,

### SEMINAR ON THE FUTURE OF THE LOGGERHEAD TURTLE

by Hans Neuhauser Director, The Coastal Office The Georgia Conservancy 4405 Paulsen Street Savannah, Georgia 31405

The future of the loggerhead turtle, Caretta caretta L. was the subject of a two and a half day seminar held at Savannah Beach, Georgia last May. The aim of the seminar was to encourage communication and cooperation among individuals and institutions concerned with loggerhead turtle problems, and to promote activities that would enhance the survival of the species.

The seminar was conducted by the Georgia Conservancy, in conjunction with the Savannah Science Museum and the Georgia Department of Natural Resources. Funding for the program was provided by the Coastal Plains Center for Marine Development Services.

Participants in the workshops heard brief statements on and then discussed various aspects of the turtle problem, including the adequacy of existing laws, the need for additional research, the opportunities for cooperative data handling, conservation problems and economic impacts.

Among the accomplishments of the seminar were the sharing of ideas and information, and the development of professional contacts. Agreements were also made to:

start a centralized bibliography of loggerhead turtle literature (Dr. Peter Pritchard, Florida Audubon Soc., P.O. Drawer 7, Maitland, Fla. 32751)

 start a regional newsletter (submit camera ready material to Charles LeBuff, Caretta Research, Inc., Sanibel, Fla. 33957, by November for January publication).

 conduct an inventory of suitable nesting beaches criteria (by Billy Hillestad, Institute of Natural Resources, Univ. of Ga., Athens, Ga. 30602) and questionnaire (by Frank Lund, Atlanta Loggerhead Turtle Research, 942 No. Pompano Drive, Jupiter, Fla. 33458).

collect summary information on each turtle project (Frank Lund, above)
 petition tag manufacturers to make a better tag for sea turtles (Rhett Talbert, Baruch Institute, Univ. of South Carolina, Columbia, S.C. 29208)

 develop centralized data bank and computer program (Thelma Richardson, Institute of Ecology, Univ. of Ga., Athens, Ga. 30602 and Billy Hillestad, above)

 development and distribution of uniform data sheet (Charles Milmine, Savannah Science Museum, 4405 Paulsen St., Savannah, Ga. 31405)

 petition Dept. of Commerce and Dept. of Interior to place loggerhead on Andangered species list.

Goals for the next five years were outlined by concensus:

In five years we will know...the results of egg transplant projects (N.C. to Va., etc.); the dietary requirements of loggerheads; where the hatchlings go;

the success or failure of hatcheries; fertilization process and sperm retention; the ratio of males to females and have an estimate of the female population.

In five years we will have...an electronic tracking system; an annual inventory of all beaches suitable for nesting; tagging projects on all nesting beaches; the predator problem under control - with special emphasis on raccoons and shrimpers; a universal tag by 1980; a central data bank; a central bibliography on loggerhead-related material.

In five years the education efforts will provide...a sustained public education campaign through various media; more emphasis on the turtle in formal academic studies; a management guide for field techniques to standardize procedures and offer assistance to new projects; a program of rotating workers from one project to another to broaden experience; and smaller, limited research projects.

In five years there will be...guidelines for beach developers leading to less encroachment on inventoried nesting beaches; a program for acquiring or protecting nesting beaches; international agreements for management and preservation of the turtle; U.S. representation on the IUCN; an organization coodinating Loggerhead and other sea turtle activity on the east coast (the U.S. Atlantic Coast Sea Turtle Conference?); and good communication channels between turtle interests and legislators.

And...the Loggerhead will be on the endangered species list!

### COMPILER'S FOOTNOTE

This NEWSLETTER was to be distributed in January of 1975. am responsible for its tardiness. In November of 1974 the voters of Sinibel Island chose Home Rule and self-determination and I threw my hat into the political ring. In December I became one of five City Councilmen and now, as you can imagine, there's hardly enough hours in each day for a full-time job, directing a progressive sea turtle project, and helping a struggling young City.

I am not, however, responsible for the poor showing of many loggerhead turtle Project Leaders in seeing that written contributions, discussing their work, became a part of this NEWSLETTER. The people attending the Savannah workshop came away thinking that a long overdue spirit of cooperation and a foundation for communication had finally developed. This NEWSLETTER was to be the medium by which this achievement was to meet those objectives. I, personally, re-main confident that a NEWSLETTER, such as this, can become a viable uniting force. (Henk- to Buff-

Sorry I'm so late!

Charles R. LeBuff, Jr.

P.S. Copies of this NEWSLETTER's mailing list are available upon request. C.L.

North Carolina: University of North Carolina, Institute of Marine Sciences. Studies of young hatchling survival, grow rates. Adults are studied for natural responses to lowering environmental temperatures. All species are included. Researcher - Schwartz

Camp Lejeune. Reconnaissance of nesting and sites used by sea turtles on beaches within military facility jurisdictions. Program expansion expected in 1975. Researcher - Wooten

### IN SOUTH CAROLINA . .

### Rhett Talbert

During the past summer, another 67 tagged loggerheads laid 205 nests along the 10 mile Kiawah rookery beach. Although nesting along the South Carolina coast seldom begins prior to mid May, females were coming ashore to nest at Kiawah as early as April 13, and nearly 20% of the season's nests had already been laid when project workers took to the field on June 11. The reduced predation levels associated with these early nests were invaluable in offsetting heavy hatchery losses due to torrential August rains.

On the coast northeast of Kiawah, however, other exciting things are happening. Cape Romain National Wildlife Refuge, probably the largest loggerhead rookery in the Southeast, extends from Bulls Island north through Cape Island, encompassing some 25 miles of nesting beach. This, the first state acquisition under the new Heritage Trust Program was the Santee Coastal Reserve, innediately north of the Cape Romain Refuge. The 22,000 acre tract includes 11 miles of nesting beach, and 18,500 acres of marshland.

Moving up the coast, one next comes to South Island, where Billy Hillestead has a tagging program conducted by Phil Wilkerson. Immediately to the north, at Winyah Bay near Georgetown, begins the Belle W. Baruch Institute's Coastal Research Station, 17,500 acres of coastal marshland, barrier beach, and maritime forest. Presently maintained by the Baruch Institute at the University of South Carolina, this tract of land is soon to be declared a State Estuarine Sanctuary. It will include another 8 milès of excellent loggerhead rookery beach, bringing to a total nearly 50 miles of coastline which will be protected from destruction by man.... good news for the turtles, and good news for the vast expanse of salt marsh included in these areas.

With the Kiawah program to continued, and nesting protected at State Parks on Hunting and Edisto Islands, the picture is beginning to brighten in South Carolina for Caretta caretta. and for coastal ecology in general.

### SEARCH FOR A NEW TURTLE TAG UNDERWAY

From communications with tag manufacturers, i't is obvious that turtle taggers will have to come up with some sound ideas before they will get any real cooperation. The production of a new tag with a limited market will be quite an accomplishment, so taggers will have to know exactly what they want.

With this in mind, Rhett Talbert will be sending out letters of inquiry to the loggerhead conference participants and other workers, designed to critically examine the materials presently being used. Several alternatives for a new tag design will be presented, and, most importantly, ideas and suggestions of turtle conservationists will be sought and encouraged.

The letters will be mailed in January and it is hoped that several experimental tags will be ready for testing in the '75' season.

The Ossabaw Turtle Project began three years ago because the turtle population, once large and healthy, was dwindling in the face of heavy predation of eggs by raccoons, pigs, and ghost crabs and drownings of adult turtles in shrimpboat nets. With the help of Dr. Billy Hillestad, a conservation and tagging project was started in 1972 using Genesis volunteers (Genesis is an Ossabaw project for individuals to pursue work in the sciences or humanities while living a basic life close to the island ecosystems).

For three years this project has operated without funding. The cost of staying on the island and keeping a hatchery has been borne by volunteers who conduct the project with aid from Mrs. West and Dr. Hillestad. After three years the project has progressed well, learning from the successes and failures of the year before, from 2500 eggs and 15 tagged turtles in 1972 to 6500 eggs and 48 tagged turtles in 1974.

Ossabaw Island, privately owned by Eleanor T. West and the Torrey family, lies off the coast of Savannah, Georgia. One of the largest of the Georgia Sea Islands, Ossabaw is 30,000 acres of undeveloped high-

land and marsh with a twelve mile long beach.

Ossabaw beach is physically ideal for a large rookery with truncated beaches on both points and wide beaches backed by high dunes predominate in between. Except for a flat part of beach in the middle 3 miles long set off by sloughs, the entire beach is covered on foot four times a night during the turtle season by four turtle walkers.

The four researchers work in pairs: each pair covering a stretch of beach about 4 1/2 miles. They cover the beach in a staggered formation; one person about 45 minutes behind the other, to the point and back. By this method each stretch of beach is covered four times by two people. Walking about 9 miles, plus the time spent with the turtles takes about five hours on the beach during the most productive hours between 10 p.m. and 3 a.m.

Each walker carries a backpack for the eggs and tagging equipment. After trying different methods of transporting eggs, this system

is the most comfortable alternative and safest for the eggs.

Difficulty was experienced in applying the metal one-piece tags which often misaligned during application, but returns during the season showed the tags still intact. Five turtles were discovered with holes in their flippers, but it is not known whether the holes were caused by a missing metal tag or one of the plastic two-piece tags used the first two years. A total of 48 turtles were tagged, ll recorded twice, one three times and one turtle four times.

Over 90% of the turtles hatched came from the first 2000 eggs planted: the other 4500 died in the ground after only little development of the eggs. Fifteen hundred turtles out of 6500 eggs are minor returns for the labor, but the nature of the catastrophe seem to indicate some deficiency, perhaps water, which we hope to correct next year.

Though the number of laying turtles went up from last year, the number of dead turtles to wash ashore stayed constant: one mature male, eight mature females, and five adolescent females (under 30 incles long).

For additional information concerning the project write:

Ishmael Williams: Project Coordinator

Ossabaw Turtle Project, Ossabaw Island

Box 13397, Savannah, Georgia 31406



GEORGIA 1974

from 19 May 1974, to 7 August 1974, the northernmost 42 miles of beach of this island were patroled nightly either with jeep, motorbike, or on foot. For recording convenience the distance was divided into half mile segments and numbered 0 - 8.

The total number of crawls this season was between 366 and 370. A few early ones and one late one (16/17 August) were missed, thus the uncertainty. Three hundred sixty-four of these crawls were documented and 210 actually encountered. The total number of individuals recognized was 76, 12 of which had substantial tags on them and were not retagged. The remaining 64 were either tagged for the first time (26) or retagged (38) using "Rototag" ear tags produced by Nasco, Ft. Atkinson, Wisconsin.

An interesting observation was the preference of beach type displayed by Caretta. Area 3 with large truncate dunes received 49 crawls whereas Area 5, only half a mile away, received but 5. The beach at this point is expanding eastward and has left a low barren area of about 100 feet between the mean high tide line and the first low dunes. The fact that the turtles avoided this area in dry runs as well as nesting would indicate this type beach is distinguishable

off shore.

Feral hogs are abundant on this island and since "hunting, trapping, and removing" are illegal on Federal property, they could be controlled on only half of the patrol area which was private property. To my knowledge, after the first week or two of nesting, no nest survived the night on Federal property. Raccoons were no problem.

The first recorded hatching were two nests on 26 July. Several nests following that were monitored after the first emergence and found to take up to 5 days to completely

hatch out.

This was the first concentrated tagging effort on big Cumberland Island but it is hoped that the National Park Service, which now holds title to 80% of the island, will encourage this project in the future.

---- Carol Ruckdeschel

### State of Florida



### Department of Natural Resources

LOCATION BAYBORO HARBOR MARITIME BASE

P O DRAWER F 5" PETERSBURG FLORIDA 33731

PHONE 896 8626 AREA CODE 813

The Florida Department of Natural Resources Marine Research Laboratory is researching techniques for marine turtle resource preservation. Current emphasis is on pen-rearing green turtle, Chelonia mydas hatchlings for tagging and re-

lease, and captive breeding studies with the same species.

The first release of 98 tagged, pen-reared, green turtle yearlings was in 1964. Returns from this release, and another release of 184 in 1967, indicated that pen-reared yearlings could adapt to their natural environment. Those intensive program was started in 1971 when enough green turtle eggs were collected from Martin County beaches to release over 1,000 yearlings in 1972. Each year since about 1,000 tagged, yearling turtles have been released. Returns have been received from each year's release, and these returns show widespread oceanic distribution. Tag returns have come from Florida, North Carolina, New York, Bahama Islands, as well as from Guyana and Venezuela in South America. Plans are being made to increase releases to about 5,000 yearlings each year. It is expected that the release of larger numbers of yearlings will provide much needed quantitative data on oceanic survival, growth, and distribution.

Some success has been achieved in captive breeding efforts, but, to date, adaquate facilities for this work have not been available. Present planning will, hopefully, lead to the development of a suitable facility for continuation of this important work. Success of this project would eliminate the need to collect eggs for pen-rearing from natural rookeries. Captive breeding is considered by many researchers to be essential to the future success of sea turtle mariculture.

While our primary concern is with green turtles, this work should provide data which will be useful in the management of other sea turtle populations.

Our research efforts with leatherback turtles, Dermochelys coriacea indicates that this species requires a highly specialized diet. They appear to need coelenterates for survival, and one captive specimen grew from a hatchling to about fourty pounds weight in one year while eating nothing but jellyfish. Indications are that jellyfish may also play an important role in the diets of loggerhead, Caretta caretta and green turtles.

The Department also cooperates with other sea turtle researchers who are interested in tagging, nesting, light response, osmoregulation and genetic studies.

Ross Witham

Marine Biologist

Stuart Field Laboratory

P. O. Box 941

Jensen Beach, Florida 33457

November 1, 1974

### CARETTA RESEARCH, INC.

### PROJECT OVERVIEW - 1974

During the 1974 summer Caretta Research, Inc. operated loggerhead turtle investigatory Units at the following Florida locations: Indian Shores, Siesta Key, Casey Key, Manasota Key, Sanibel Island, Bonita Beach, Vanderbilt Beach, Naples Beaches, Keewaydin Island, Cape Romano, and Sebastian Inlet State Recreation Area. Most of these Units are directed by coastal residents who are knowledgeable of loggerheads and are experienced in the conservation and field research functions of their respective community projects.

Approximately 300 new loggerheads were tagged at the above Units and dozens of returns to specific beaches were observed. Nesting beach relocation, some over considerable distances, were recorded on an increasing scale. Monel tags were applied to the front left flipper, unless that appendage was missing. The right flipper of each loggerhead examined is carefully checked for possible tags that may have been applied by other projects. Tags with the prefix CR were used exclusively along the Gulf Coast and SI prefix tags were attached to nesting loggerheads at our special project near Sebastian Inlet on the Atlantic Coast.

Egg counts, relocation of endangered eggs and collection of standard data (dimensions, weight, etc.) were continued. Some notching of the marginal scutes of hatchlings was accomplished on Sanibel Island; an ongoing project since 1969. There were no long-distance tag returns of any project-marked loggerheads during the year.

Grants were provided to ten high school students for their assistance in summer field work. These young people are selected because of individual plans for a career in the biological sciences. The remainder of the operational task force of Caretta Research, Inc. consisted of unpaid volunteers; including the Project Director and Unit Leaders.

For most beach areas where Caretta Research, Inc. operated (68 miles of nesting beach were routinely patrolled) problems of nesting, and hatchling production, varied. Coastal development; seawalls, building lighting, nightime pedestrian traffic, etc., all accounted for degrees of disturbance and nesting loss or condensing. On more remote beaches which were accessible by vehicles, traffic flow along the beach altered normal timing for nesting emergences and most turtles came ashore in the wee hours of morning. This change made contact with nesting loggerheads, by turtle workers, often difficult if a specific project was not operated from dusk until dawn.



### STUDY BEACHES

### VIRGINIA

Chicoteague Chincoteagus NWR: Refuge Manager

Virginia Beach Back Bay NWR: Refuge Manager

NORTH CAROLINA

Pea Island Pea Island NWR: Refuge Manager

SOUTH CAROLINA

Cape Romain Cape Romain NWR: Refuge Manager

Kiawah Island Baruch Institute: John Dean, Rhett Talbert

### GEORGIA

Wassaw Island Wassaw Island NWR: Ron Snyder, Charles Milmins,
Win Seyle, Gary Cail, Jerry Williamson
Ossabaw Island Project Genesis: Ish Williams, Carol Wright

Blackbeard Island Blackbeard Island NWR: Scott Osborne, Billy Billestad

Jekyll Island Brunswick Junior College: Mallory May, John
Hamilton

Little Cumberland Island Little Cumberland Island Association:

Gen. & Mrs. HerbertPowsll, Jim & Thelma Richardson
Cumberland Island High Point: Carol Ruckdeschel, John
Pennington

### FLORIDA - EAST COAST

Melbourne Melbourne Project: Billy Turner

Sebastian Inlet Caretta Research, Inc.: Ed Phillips

Jensen Beach Florida Department of Natural Resources: Ross

Jupiter Island Atlantic Loggerhead Turtle Research: Frank Lund

### FLORIDA - WEST COAST

Cape Sable Caretta Research, Inc. & Everglades National Park Gary Davis

Cape Romano Caretta Research, Inc.: Paul Zajiosk

Keewaydin Island Caretta Research, Inc.: Lanny Sherwin

Naples Beaches Caretta Research, Inc.: Bill Mixer

Vanderbilt Beach Caretta Research, Inc.: Bill Teach

Bonita Beach Carstta Research, Inc.: Jim Vanas

Sanibel Island Caretta Research, Inc.: Jim Anholt

Captiva Island Caretta Research, Inc.: Pat Hagan

LaCosta Caretta Research, Inc.: David Zajicek

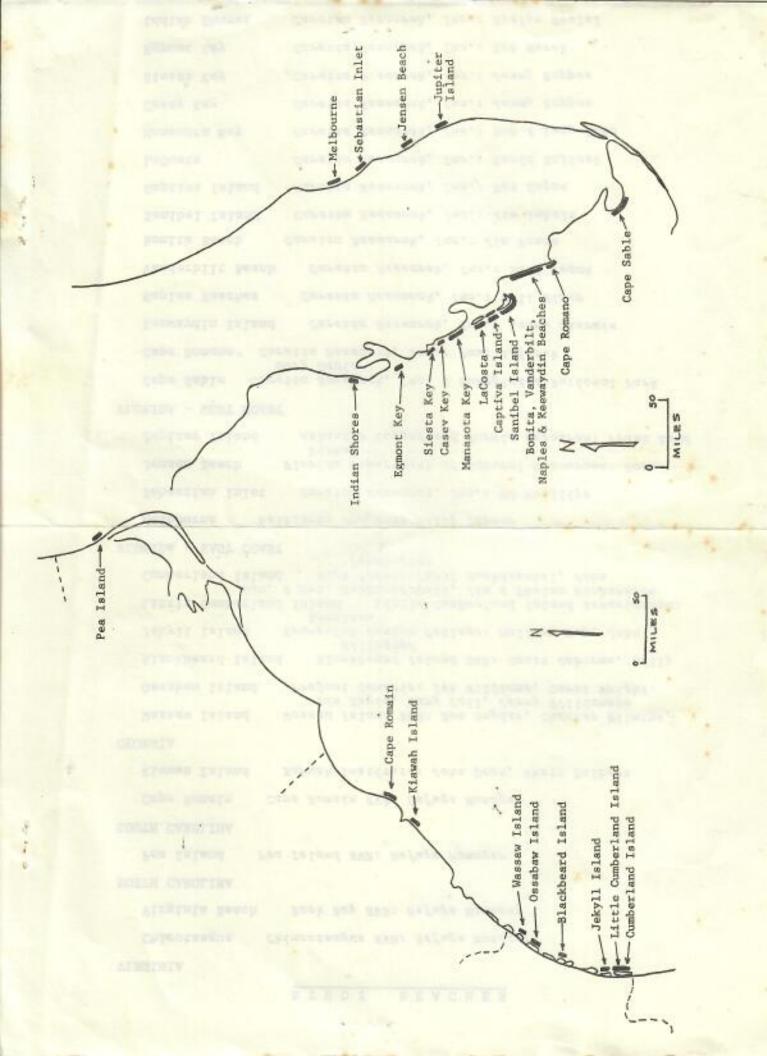
Manasota Key Caretta Research, Inc.: Bob & Lucy Pond

Casey Key Caretta Research, Inc.: Jenny Hoppes

Siesta Key Caretta Research, Inc.: Jenny Hoppes

Egmont Key Caretta Research, Inc.: Bob Marek

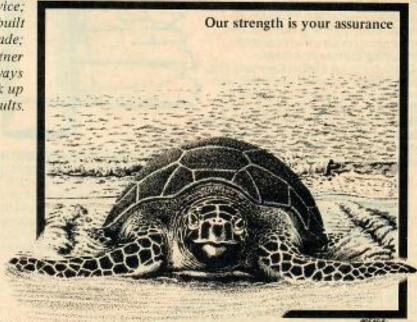
Indian Shores Caretta Research, Inc.: Evelyn Hoelsl



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BUSINESS WEEK: December 27, 1976

INTERNATIONAL BUSINESS

You can even make a bubble "mask" th no hands. First, try the one-hand thod shown in the third drawing. en turn your head toward the side opsite your hand. If you have the angle t right, when you remove your hand u'll be able to keep a small bubble in ur eye socket. Because the bubble is y, you must look in the same direction



tilted your head in order to see arly. Sometimes swimmers accideny pick up such bubbles, seeing a hand arm clearly for an instant before it omes blurred again. Usually these obles break right away due to the er turbulence. But if you swim slowly don't change the angle of your head, can keep the bubble in place and see arly for a relatively long time - with a hands free! See fourth illustration.

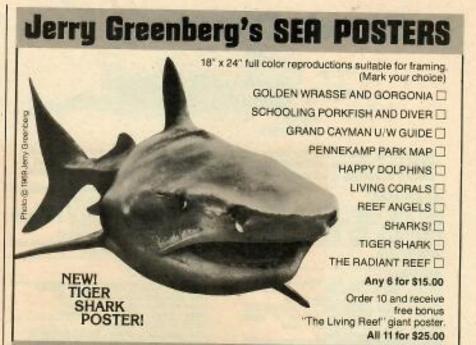
you curl your fingers over your head, you can make a large bubble 1 more air space around your eye. enables you to look at an angle ford as well as straight down, widening r field of vision and increasing the



iency of your search. You may find you need to tilt your head sideways, ard or back a little to capture the est possible bubble and see in front of A little experimentation will perfect Of course, you could use both hands et a larger bubble and a wider angle orward vision, but then the air will ably escape when you reach down. ne one hand method is best.

hen looking forward at an angle, any ct you see will not be in line with

(Continued on Page 96)



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### **EDITORIAL**



"He who catches the joy as it flies, lives in eternities sunrise." James Paul Freeman 1944-1976

### TURTLE OIL "The Supreme Cream"

At least—because of an ecology whe turtle former in the Coribbean, who repleasibles the ocean's supply arther than uslegit up, turtle oil skin care has come home. Here we bland
the intracile of turtle oil into a skin care system we call
GOLDEN TURTLE. It contains everything that's essential
for your skin, like wherein E. of, aperals natural proteins,
according enoblants and unquerns. We made it PH balanced. Hypo-ellergenic, and we gave it a fresh clean frogenite that is light and beautiful to sear. Most of us know
turtle oil is the best—well, now it's better, and you don't
have to travel outside the U.S. to get it. There is no better
time then now to ket GOLDEN TURTLE prove taself to you
by putting the soft healthy look back into your summer
damaged skin. GOLDEN TURTLE will seelly soften away
those little least around the eyes and mouth that all too
soon become deeper. GOLDEN TURTLE is not just an
other losion. It is turtle oil skin care. It is truly uneque and it
somes, fromet in our promise to keep your skin soft, young
and healthier, right now!—And we will keep that promise or

give you your money back, fan't your face and body worth the best care you can give it? You bet it is! GOLDEN TURTLE is not available in eny store-onywhere. We will send it to you the arms day we receive your nerre, address and payment. Lotton—8 oz. \$7.00. Super Rich Mosturber—2 oz. \$7.00. Super Rich Mosturber—2 oz. \$5.00. TO GOLDEN TURTLE, 3214. Pacific Coast Highway, South Loguno. CA \$2677. "The Suppress Crases."

"The Supreme Crane" T-SHRRTS man's \$5.00, letter one sleeve French or \$90.00.



- MAY 1976 Smithsonian

With no carbon in the fuel, the only pollutant would be oxides of nitrogen, but these are avoided by inducting tiny droplets of water (condensed from the exliaust) into the combustion chamber.

With visions of Hindenburgs dancing in the public's heads, the hydrogen bus makers, the Billings Energy Research Corporation, have stored the fuel in nongaseous form in metal hydrides. The bus, Billings claims, will go 100 miles without refueling. And the hydrogen, they say is cheaper to produce—from low-grade coal—than the cost of refining gasoline.

It seems that, indeed, this is a bus worth waiting for.

A poise for silence

Last month we heard about Ambisound, a British invention whereby the listener is totally surrounded by sound. This month brings news of an even more sophisticated intrusion that is on the drawing boards: holographic television.

Holography is the technique whereby, with the use of lasers, one can produce a three-dimensional image. Its inventor won a Nobel Prize for it, but holography is still in its developmental stages and appears to many to be a technology in search of a function. Now The Futurist (Volume X, Number 1) suggests that in 15 years we may be able to "create an endless variety of pleasantly ambiguous or structured forms which float through the room bobbing to piped in electronic music." The lonely shut-in may be able to create a host of friends. Harvey the rabbit will become more than an image in Elwood P. Dowd's mind.

The Futurist goes on to say that "the teen-ager may lose all poise when his favorite rock group is optically created in the living room complete with quadraphonic sound." All very well, yet one cannot but think that it will be the parents, and not the teen-agers, who will lose all poise.

The turtle as compass needle

Legends abound in Central America about turtle-shaped rocks that face the sea but occasionally turn like compass needles to face inland. At such times, the sea turtles return to their traditional nesting beaches. The legends are no doubt ancient, and one wonders if their source may not have been found by Vincent H. Malmstrom, a geographer at Dartmouth College.

He reports in Nature (Volume 259, Number 5542) the discovery of "strong circumstantial evidence" that the pre-Columbian people of Izapa, in Chiapas state on the Pacific coast, knew about magnetism and may have associated it with the navigational abilities of sea turcles. (Other scholars have found such things as a shaped piece of hematite, which the Olmecs must have used as a magnet.) The Mayans were familiar with mercury, in which one can float magnets.

Dr. Malmstrom's evidence is a large stone turtle head. No matter where a compass is moved along the perimeter of the head, the needle points to the turtle's snout. Other nearby sculptures include a representation of an upturned turtle shell, an excellent bowl for floating a magnetic needle on a piece of wood. "It may be interesting to note," writes Dr. Malmstrom, "that the theory that turtles navigate by magnetism has not yet been discounted."

### Is magnetism hazardous?

Elsewhere on the magnetic front, Science News (Volume 109, Number 13) reports some speculation that reversals in the Earth's magnetic field may have led to extinctions of species on a grand scale. Species of radiolaria, foraminifera, even mollusks, vanished for good during the times of magnetic reversals.

No one knows the mechanism: it might be that with weakened magnetism, more cosmic rays strike the Earth, or that the climate changes drastically, or that the ozone layer is reduced, permitting an excess of ultraviolet to hit the Earth. Some say there is no mechanism, no cause and no effect,

Perhaps the sea turtles know. After all, if they do navigate by magnetism, things must have gotten pretty confusing for them during times of reversals.

### Trivia

Farm Journal has one for the folks who produce the Guinness Book of Records. A North Carolina farmer named Edward E. Weeks has just broken a 40-year-old record by growing a watermelon that weighs 197 pounds. The melon contained 1,717 seeds.

JAMES K. PAGE JR.

SKIN PIVER Mar - 76

TURTLES RETURN

The green turtle (Chelonia mydas) seems to be making a comeback along a 150 mile stretch of Florida's Atlantic coastline. According to a report issued by the Florida Dept. of Natural Resources, an estimated 3000 loggerhead and 20 green turtles have deposited their nests along Hutchinson Island. 2500 green turtle eggs have been incubated and will be released in the department's annual stocking program, and another 1857 young turtles have already been released at several protected Atlantic beaches. The green turtle had been placed on the list of threatened species by the federal government.

July 15,76 Largest Turtle

WASHINGTON (AP) ured II feet from nose - The world's largest turtle, fossils of which were discovered in Venezuela in 1972, had shells of over seven feet when they roamed the earth - about five or six million years

Paleontoligists Roger C. Wood named his discovery Stupendemys

to tail and weighed three tons.

Wood's two speci-mens measure 7 feet 2 inches and 7 feet 6 inches, The larger shell was found in frag-ments, while the smaller one was almost completely intact.

It is now on display at the Museum of Comgeographicus and said parative Zoology at they may have meas-

### The most mysterious anin

By NICHOLAS C. CHRISS

Los Angeles Times Service

SOUTH PADRE ISLAND, Tex. — Not long ago, in broad daylight, a big blue-green sea turtle moved cautiously out of the Gulf of Mexico's warm waters, her reptilian eyes darting up and down the shoreline. Cautiously, she lumbered up onto the beach.

In a few hours she had found a safe place to lay her eggs in the fine white sand. She carefully buried the eggs, made a decoy nest to throw off predators, and unseen, slipped quietly back into the sea.

"Everybody ought to see a turtle nesting," wrote Dr. Archie Carr, a sea-turtle expert, in his book "So

Excellent a Fishe."

"It is an impressive thing to see, the pilgrimage of a sea creature back to the land... the nesting rites begin when the turtle strands in the surf. That part is hard to watch, those minutes when she comes up with the breakers and stays there for a while, rising with a wave and then bumping back softly on the sand, making up her mind.

"She is clearly making a decision. The turtle is wild and skittish when

first coming ashore.'

The wild and skittish turtle—a species named Ridley—that came to this island arrived in August. She had been gone 10 years, perhaps more. Now, with unerring accuracy, she had arrived back from no one knows where, to lay her first batch of eggs. She had departed from this exact site as a baby turtle, the size of a silver dollar, weighing about half an ounce.

Now she weighed almost 100 pounds. Her sensitive shell was 26

inches across.

Where had she spent all those years? How many thousands of miles had she swum? How had she survived? How did she know where to return? No one knows. Perhaps no one ever will.

Of the five species of sea turties, none poses more of a riddle than the

Ridley.

The Ridley is the only sea turtle that lays its eggs in daylight, and the only one that once came ashore at its Mexican nesting place by the thousands in a single day. As many as 40,000 would flip about in the sand, lay their eggs and depart.

The riddle of the Ridley is one reason Dearl Adams, a contractor from nearby Brownsville, became involved with the sea turtles in 1963—that and his belief that the Ridleys were vanishing and should be saved. No one else seemed to care much at the time. Since then, although Adams and his friends may not have succeeded in saving the Ridley, they have at least shed some light on its plight.

Starting in 1963, Adams, his wife Ethel, Ila Loetscher and Earl and Olive Irene Lippoldt have buried the Ridley eggs, protected them, watched them hatch at 3 a.m., seen them go to sea and then waited, waited, waited for their return.

The experts estimate that there are only 10,000 Ridleys left in the world. Their only nesting place is 50 miles north of Tampico, on Mexico's eastern shore, at a little place called Barra Calabaza. When Adams saw a film in 1962 of the thousands of Ridleys nesting there, and learned that they were being destroyed for their eggs and hides, he decided to do something about it.

His idea was to import the Ridley

eggs to the South Padre Island beach and create a safe rookery in the United States where the Ridleys could return to nest, instead of being destroyed at birth by sand crabs, coyotes, egg poachers and leather hunters.

When Adams and his friends began hauling the Ridley eggs from Barra Calabaza to South Padre Island, it was a 12-hour drive. They thought they had a protected stretch of remote island beach here. But since then, this once-desolate island has undergone a real estate boom and the strip they expected to be a sanctuary under the Federal Wildlife Act failed to gain that protection.

So it has not been easy. There are other predators now: curious tourists, careless beach drivers, toxics in the water, shrimp boats off the shoreline. A sea turtle caught in a shrimper's net can easily drown.

Since they began in 1963, Adams and his friends have buried 5,000 Ridley eggs from Mexico on the South Padre Island shore. About 1,250 of them have hatched, but, so far as they know, only three turtles have returned—the one last August, another earlier in June and the first, named Alpha, in the summer of 1974.

There may have been other Ridleys that returned, laid their eggs and went back to sea. No one knows.

Each year, Adams and his companions buried the Ridley eggs and each year they waited from April 25 to Sept. 1, the nesting time, for the female turtles to return.

Until Alpha arrived, they were frustrating years. It was not easy patrolling a 30-mile stretch of beach, staying up nights making certain

### nal in North America

that the eggs would hatch and the baby turtles would get out to sea safely, and then driving another 30 miles to work in the morning.

No one has the slightest idea of what becomes of the Ridleys at sea. They have been spotted as far away as South Africa and Ireland, as well as apparently migrating off Key West, Fla. Some are obviously captured and killed for their hides and eggs. In 1972, Adams said, 40,000 pounds of turtle hides came into the United States from Mexico, destined to be made into shoes in Japan.

"It's a wonder any Ridleys are left at all," Adams sighed.

He still recalls his despair when he first went to Mexico to see the Ridley nesting site, and spotted truckloads of Ridley eggs being sent to the cities for sale.

"Boats would lay offshore and scoop up thousands of live turtles and cut them open just for the eggs," he said.

When a Ridley male impregnates a female—no one knows exactly when this happens—she can have up to three batches of eggs over a period of time. The eggs are thus popular in Mexico because they are believed to contain aphrodiasiacs.

Curiously, the female Ridley, once ashore and laying her eggs, is oblivious to any disturbances around her.

The eggs hatch about 50 days after they are laid, and the young turtles begin emerging around 3 a.m. to make the 20-minute journey into the water.

They have a sure instinct to make a beeline for the sea as soon as they are born, Adams said. Only about 15 per cent of them normally survive the trip, and the mortality rate from predators is even higher once they are in the water.

The greatest difficulty in studying the Ridleys is that they are rarely seen. No one knows the origin of their name. They were once even believed to be hybrids.

In another of his books, "The Windward Road," Carr, the sea turtle expert, wrote that "it bothered me that the Ridley should be such a distinct and original-looking creature, with his traits his own and nothing about him that seemed intermediate between the other species.

"As I said, that was a long time ago, and I have made very little progress. Indeed, the Ridley mystery has grown rather than shrunk and I am further from the solution than I seemed then.

"You don't just go out and catch sea turtles on an afternoon collecting trip, and there are no really good sea-turtle collections in any of the world's museums.

"The answer is so illusive that I have come to regard the Ridley as the most mysterious air-breathing animal in North America."

After many years of experimenting with the elusive sea creature, so have Dearl Adams and his friends.



### Daily Enterprise Riverside, CA. Seaquarium now a sanctuary

MIAMI (AP) - Miami Seaquarium, 65 acres of bird and marine life on Virginia Key, has been declared an official wildlife sanctuary by the Dade County Park and Recreation Dept.

This land and sea area provides a home for hundreds of species of fish and birds, bottlenosed dolphins, killer whales, sea lions, sea turtles, alligators and iguanas. The area is also a rookery for many varieties of wild birds. Nov. 19.176

Nov. 19, 176

Friday, June 18, 1976 — THE DESERT SUN, Palm Springs, Calif. — B1 Fil

### **Hungry Tiger Offers Delicacy: Sea Turtle**

Caribbean, but now the Caribbean has come to the desert. In fact, it has come to the whole West Coast in the form of the Caribbean Sea Turtle, and is now the newest item on the extensive sea food menus at The Hungry Tiger Restaurants in

The Hungry Tiger chain has created another "first" by offering this gourmet delicacy. It is now on the menu at the desert's Hungry Tiger Restaruant in Rancho Mirage.

"The sea turtle has almost no fat or cholesterol," informed local Hungry Tiger manager Andy Andersen. "The meat is very tender and tastes similar to veal. There is no fishy taste," he said.

The Hungrey Tiger together with Terbak Corporation is licensed to offer this

RANCHO MIRAGE - We new food which is farmed may be a long way from the commercially in the British West Indies.

> The green sea turtle is now being farmed in the West Indies and because of the farming the chances of survival of this almost extinct species is now better than ever. More than a per cent of all the hatched turtles are returned to the seas.

"The turtle is higher in

protein count than beef, andalso very low on calories," added manager Andersen.

The sea turtle is flown in fresh to the Hungry Tigerrestaurants, as are the fresh-Maine lobsters, Boston schrod, oysters, clams, shrimps and all the other: scafoods offered on the daily menu at the desert and other Hungry Tigers.

### Dining & Entertainment

### The Revolutionary Turtle

By Sid Moody, Associated Press

There were many Yankees in the American Revolution, but there was not too much ingenuity. The war was fought with weapons tried and true. But one night in the waters of New York harbor, there was a most remarkable technological breakthrough.

David Bushnell was one of that happy breed for whom gunpowder was invented. He loved to make things go bang. He was also a constant tinkerer and read anything he could lay his eyes on, which interest led him to enroll at Yale even though he was 31.

While his younger classmates were passionately arguing the cause of liberty, Bushnell was thinking: British fleet, gunpowder; gunpowder, British fleet. His curiosity aroused, he went to a pond near New Haven and submerged two ounces of gunpowder in a cannister to see if he could ignite it under water. Bubble-bang! British fleet, British fleet, gunpowder, gunpowder . . .

WHEN THE NEWS of Lexington and Concord reached New Haven, Bushnell went back home to Old Saybrook on the Connecticut River. He was going to build the world's first submarine.

To put any Tories off his trail, he told the world he was going fishing and retired into a shed on the river where he kept his nets. Instead he began shaping what looked like a giant egg coated with tar with two pipes out the top, a rudder, a 700-pound lead keel and two fin-like paddles.

"It was of a capacity to contain one engineer" who would climb in, close the hatch, look where he was going through one of six tiny windows and begin paddling through watertight joints.

He had two pumps, one to expel water and one to let it in to submerge. Part of the keel could be jettisoned "if the pumps should get deranged" so the craft would bob to the surface. He even had a compass and a glass tube with a cork in it to indicate the depth.

BUSHNELL FIG-URED THE "engineer" could make three knots in short bursts cranking the paddles with one hand and steering the rudder with the other and pumping water in or out with one foot.

Its armament was also egg-shaped, a keg



The world's first submarine, called the America turtle, surfaces in New York harbor in September 1775. It was designed and built in Connecticut by David Bushnell.

containing 150 pounds of powder fired by a clock work and a flint gunlock. Arriving at his target, the engineer screwed the charge into the bottom of the hull with an auger and then cranked himself to safety. Bushnell christened his invention American Turtle and let it be known he was ready.

Bushnell took Turtle to New York. He thought he was too frail to man Turtle in combat and nominated his brother Ezra to be engineer.

CONVEN-EZRA IENTLY came down with a fever. Sgt. Ezra Lee, a 27-year-old from Connecticut, who had volunteered to man a fire ship, agreed to become history's first submariner. He made some trial runs in Long Island Sound, then Saturday night, Sept. 7. Turtle was launched into the Hudson near South Ferry. climbed in and was towed out into the stream by two whale in all directions, and I thought the best generalship was to retreat as fast as I could, as I had four miles to go. The enemies' attention was drawn toward me from Governor's Island... at length a number came down to the shore, shoved off a 12-oared harge and pulled for me.

"I eyed them, and when they had got within 50 or 60 yards of me. I let loose the magazine in hopes that if they should take me, they would likewise pick up the magazine



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him as near as they dared to Eagle, and Lee began cranking. The current was ebbing, so it was almost dawn before he came up under the stern of a man-of-war.

be blown up together. "But as kind Providence would have it,

"I could see the men

on deck and hear them

doors, sunk down and

came up under the bot-

tom of the ship. I pull-

ed along to try another place, but deviated a

little to one side and

immediately rose with

great velocity and came above the sur-

face, then sunk again

"I hovered about to

try again, but on fur-

ther thought I gave up,

knowing that as soon as

it was light, the ship's

boats would be rowing

like a porpoise.

"I then shut down all

talk," Lee reported.

they took fright and returned to the island, to my infinite joy. I then weathered the island, and our people seeing me, came off with a whaleboat and towed me in. The magazine, after getting a little past the island, went off with a tremendous explosion, throwing up large bodies of water to

an immense height."

Lee had been trying

to bore his mine into

Eagle, and Bushnell

conjectured he had hit an iron underwater fit-

ting. A month later a

sloop carrying Turtle

up the Hudson was

sunk, but the subma-

rine was recovered al-

though her fate is a

mystery. However,

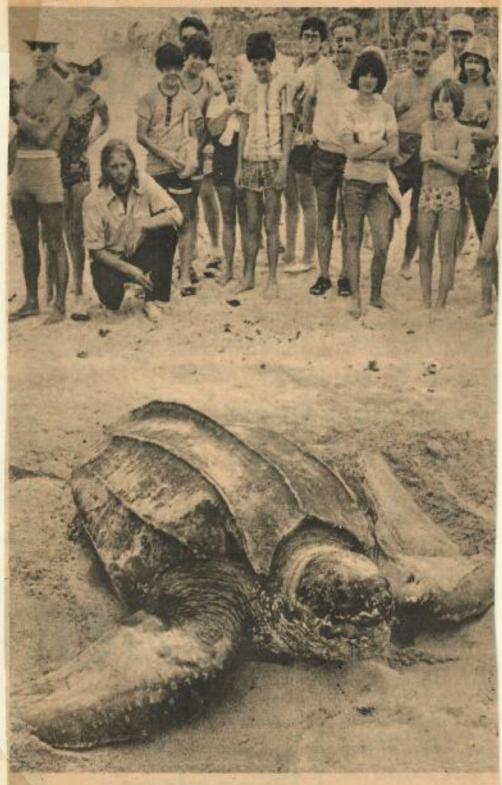
in 1777, Bushnell tried floating kegs, loaded with powder and a time

fuse, down the Dela-ware. They missed the British ships at anchor, but when they went off. they made a hell of a

When William Howe captured Philadelphia

Bushnell persisted.

### TUE. APR. 20, 1976 PALM SPRINGS, "THE DESERT SUN" CALIF.



CONTROL CONTRO

EASTER EGGS! — This giant leatherback turtle, acting like Easter bunny, left more than 100 eggs on the beach at

Miami Sunday as bathers looked on. Then she calmly waddled back into sea. (UPI Telephoto)

### Here Come The Tortoises

What has no teeth, eats cacti, carries its own canteen, disappears for five months of the year and is 30 million years old?

Right! The California desert tortoise.

March is the month that these interesting reptiles, along with most desert snakes, emerge from their long winter's nap to yawn in the bright spring sun and go about the business of living for another year.

For a venerable specimen, this may be the 80th or 90th time it has responded to the lengthening days and warmer air. There is no way of telling for sure how long desert tortoises may live unless there's a record of when they were hatched, but individuals 90 or 100 years old have been recorded.

Moses, for many seasons the official greeter at the Hi-Desert Nature Museum, was a centenarian when he

finally succumbed.

Unfortunately, your chances of seeing one of these formerly plentiful creatures in the wild is smaller than it once was So many have been killed or taken from the desert (often merely to die) that California has had to declare its official state reptile a protected species.

It is now unlawful to sell, purchase, harm, possess, take or shoot any projectile at a desert tortoise. Other protected desert life includes, bighorn sheep, kit foxes, desert iguanas, chuckawalla and horned lizards, several species of snakes and many

plants.

The law, however, cannot save tortoises from careless or unobservant motorists who run over them on highways, from thoughtless dune buggy and trail bike enthusiasts bounding across open terrain or construction buildozers that sometimes unwittingly destroy them during hibernation. Thus, their ranks are thinning even with their protected status.

Wild tortoises are one of the most inoffensive and harmless of nature's creatures and, once grown, are well protected against natural hazards. The eggs, however, are sometimes discovered and eaten by coyotes, snakes, skunks — and man. The babies are subject to predation by hawks and roadrunners and must contend with extremes of temperature, the possibility of drowning in a sudden rainstorm and falls that crack their tender shells.

Those that survive, possibly 10 per cent, mature sexually in 10 or 12 years and generally reach full growth at about 20. Individuals can reach a length of 14 inches and weigh up to 25 pounds.

In the spring, they gorge themselves on wildflowers and green grasses. As the summer wears on, they munch dry grass, seed pods, beavertail and prickly pear cactus and the leathery leaves of desert plants.

Tortoises drink water if they find it after a summer rain, storing up to a pint, enough to see them through the season. But they also have the useful ability in an arid climate to manufacture water from their food. The shells—the upper one is called the carapace, the lower the plastron—help prevent their tissues from drying out and their body wastes are eliminated in almost soldi form, further reducing the need for water.

Since tortoises have no internal temperature control system, they take to the earth for protection against both heat and cold. Winter hibernating burrows average 10 feet in length. In summer, they rest during the hottest hours in shallower excavations or in the shade of bushes.

How fast can a tortoise walk? Well, faster than you might think, particularly when they're young. And their camouflage is so good they seem to disappear a few feet away. But their usual speed when out for a stroll is about 20 feet a minute.

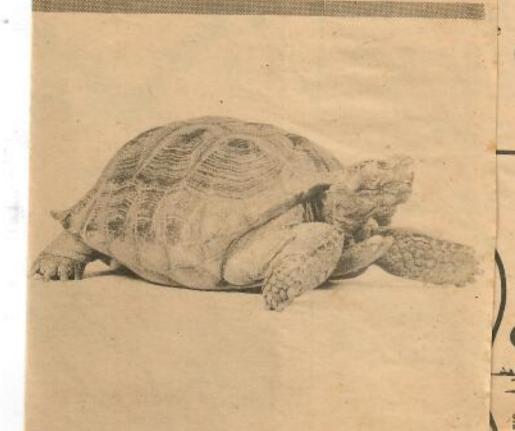
They also have an excellent sense of direction, so if you help one across a road, as we hope you will, be sure to take it in the same direction it was headed. Because if you don't, it will simply turn around and start into the

line of traffic again.

That 30 million year figure? That's how long tortoises have remained virtually unchanged. Survivors from the Age of Reptiles when dinosaurs trod the earth, tortoises have become perfectly adapted to life in the American deserts. It would indeed be a tragedy if that Johnny-come-lately, man, caused them to vanish when all the changes of nature have rolled like raindrops off their brown and yellow shells.



LAP



SURVIVOR - The California desert tortoise, official state reptile, has found ways to overcome drought, heat, cold, predators, climatic and geologic changes - just about everything but wheels and bullets.



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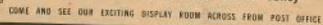
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# "Lonesome George' May Be the Last a

By James H. Phillips

WASHINGTON (AP) - Consider the plight of Lone-some George, the Pinta Island tortoise who probably is the world's lonellest creature.

Lonesome George is the last known member of his subspecies, the last to carry the traits peculiar to his breed. There are no known females of this particular giant Galapagos Island tortolse.

And Lonesome George is expected to live another

Lonesome was discovered in 1971 while plodding Before his discovery, the Pinta Island subspecies was thought to be extinct, killed off by 19th century mariners and by the introduction of goats to the island. The across Pinta Island, perhaps in search of a mate

goats destroyed the vegetation necessary for the tortotse's survival. INTENSIVE searches on Pinta Island since George's discovery have failed to turn up any others. Indeed, Lonesome George may hold the distinction of being the rarest creature in the world.

In 1972, Goorge was taken to the Charles Darwin Research Station on Santa Cruz Island, the headquarters for most research on the Galapagos, a group of islands off the Ecuadorian coast. His age is estimated at 40 to 60 years.

tion, today is scouring zoos across the globe in hopes The World Wildlife Fund, a conservation organizaof finding a mate for George.

A spokesman for the organization said many zoos

have captive giant Galapagos tortoizes. Whether one of these tortolses will turn out to be a Pinta Island subspecies instead of one of the 10 other subspecies remains unknown. It takes a biology expert or anoth-

for saving the Pinta tortoise are very great," says Craig MacFarland, director of the Charles Darwin Wardens have killed almost 37,000 goats on the is-Research Center, in a recent paper on the tortoise.

"THERE IS NO doubt, based on experience on

recovered remarkably," said MacFarland.



LONESOME GEORGE' - This Pinto Island fortoise may be the loneliest creature in the world. He is the sole known survivor of his subspecies. -

er tortoise to tell the difference, the spokesman suid.

"If even one female can be found, then the chances land and the vegetation on Pinta Island "has

other islands, that young tortoises would survive well on Pinta if repatriated there," he adds.

# of His Kind

Lonesome George, meanwhile, is confined to a pen at the research center. He is being kept with two females of unknown origin.

"This is primarily being done to insure the general health of the male and that he suffers no sexual dysfunction from inactivity as is known to occur in some species when they are kept in captivity without mates," MacFarland said.

What if they cannot find a female in a zoo? "It may be necessary to consider breeding him with females from a very similar subspecies.

"If offspring from such a cross seemed totally normal, then they could be back-crossed with the male, and so forth, in order to obtain a nearly pure Pinta stock for repatriation purposes," said MacFarland.

STILL LOOKING - Lonesome George, one of the world's rarest creatures, cranes his neck in search of the female partner scientists hope for, but so far have been unable to find. George has other girl companions, but they're not his type.-AP Photo.

# They Call Him That for Reason

WASHINGTON (AP) — When tourists arrive on the Galapagos Islands, "one of the first questions they ask is, 'Where is Lonesome George? Where can he be seen?' " says Craig McFarland, director of the Charles Darwin Research Station.

The tourists seek out Lonesome George because he probably is the world's rarest creature, the last known survivor of his subspecies, the last to carry the traits peculiar to his breed.

George is a male Pinta Island tortoise who survived for years in a land without females.

PUBLICITY ABOUT Lonesome George helped spur a search of zoos across the globe in hopes of finding a female Pinta Island tortoise.

"I very frankly don't think there is a female in captivity anywhere," said McFarland, who was in the United States to raise funds for the financially strapped biological research station.

However, he said, "we're still hunting on Pinta

Lonesome George was taken off Pinta Island soon after his discovery in 1971 and placed in a pen at the research station on Santa Cruz island in the Ecuadorian archipelago in the Pacific Ocean. His age is estimated at 40 to 60 years. He is expected to live for another 100 years.

FOR LONESOME George, the move probably was the most significant event of his life. Two female tortoises of unknown origin were placed in his pen several months ago, McFarland said.

"He's got the spirit," McFarland added in an interview at the World Wildlife Fund.

The females were designed to insure that George did not become sexually dysfunctional through a lack of activity and unable to reproduce his kind in the event a Pinta Island female was discoverd.

The Pinta Island tortoise's near demise was attributed to goats on the island that destroyed vegetation and early buccaneers, whalers and scalers who killed tortoises for food in the 18th and 19th centuries.

# Eat It Before It Eats You

NEW ORLEANS (AP) — The movie "Jaws" might be anathems to some seashore resort operators, but Preston Battistella figures it will give his business a shot in the arm.

The New Orleans seafood vendor says he sold about 150,000 pounds of shark meat last year, but expects sales of some 300,000 pounds this year, partly because "Jaws" has caught the public fancy.

Most of Battistella's shark meat comes from sand and dog sharks brought in by Gulf fishermen, who previously would throw the 4-to-6 foot fish away.

"PEOPLE ARE shark-conscious now," Battistella said. "In some areas, the movie has stimulated sales. In other areas, it has hurt.

"It's a matter of educating the public that you can't always eat the high-priced fish. You can't ignore the ground meat of the seafood industry."

Battistella will supply 25,000 pounds of breaded shark filets to New Orleans public schools for their lunch programs this year. They have used shark before as a base for gumbo.

Battistella thinks shark filet has a taste similar to catfish or redfish.

HE SENDS 10 TO 15 pounds of dorsal fin—the one that sticks out of the water — to Gunter Preuss' Versailles Restaurant here each week as the base ingredient for shark fin soup.

Preuss compares the taste to that of a clear turtle



Gunter Preuss prepares a shark delicacy.



Hono Ster-Bullet August 23, A75

# 'Ultimate Unique Pet'

# For Sale: Weird Turtle

By Helen Altonn Star-Bulletin Writer

Island turtle lovers have an opportunity for just \$400 to collect the "art object" of the reptile world — a matamata, considered the most bizarre of all turtles.

There's only one in Hawall and it belongs to Paul Breese, former wildlife chief at the State Fish and Game Division and former Honolulu Zoo director.

He is advertising his pet for sale in the Sunday Star-Bulletin and Advertiser because he is moving from Oahu to the Big Island

His ad acclaims the

matamata as "the ultimate in unique pets."

REPTILE authorities describe it in such terms as "weird, strange, unique, bizarre, queer..."
"The face of the

"The face of the matamata suggests an advancing army tank," says Time-Life's "The Reptiles."

Two matamatas were given to Breese by a friend on the Mainland 2½ years ago. He gave one to the Honolulu Zoo but it didn't survive.

His turtle has grown to 12 pounds — the biggest he's ever seen, although scientists say they can grow to 16 pounds. He feeds him sashimi twice a week.

The matamata, a native of the Amazon River, is the only turtle that feeds by suction. "He has a great big neck like a slurp gun. He can bring things in from six inches away," Breese said.

"WHEN he yawns he's incredible. The whole inside is kind of pink. He's all mouth from ear to ear."

"Mata" has tiny eyes, a little nose — a "snorkely" thing — and a lot of flaps that Breese doesn't think be can flap.

He trained the turtle to stretch up out of the water for his dinner, which he sweeps into his mouth like a vacuum.

"He's never had a sick day in his life, at least that I can detect," Breese said. "He doesn't require much care and he should live on years and years and years with no trouble.

"He's a very neat prop. You can make him do darn near anything.

"He's sort of the piece de resistance for the turtle aficionado."

The \$400 price includes the turtle's home, a 100gallon aquarium built by the former curator of Scripps Oceanographic Institution, and the filters.



PET FOR SALE — "At first glance it looks like almost anything, or almost nothing, but scrutiny convinces one it must be a turtle." It's the matamata, described by Clifford H. Pope in "The Reptile World." — Photo by Terry Luke

1 as ardent admirers — I night 2.4 Vet 14 ST irtles are in danger, Warns expert

g.owth of off-shore fishing is threatoning the survival of turtles in the reion, the head of a world turtle conserva-

Mr. Tom Harrison, head of a world turwe group set up by the International Union for the Conservation of Nature, said fishing nests use very strong nets which catch and frown adult turtles in nesting beaches in the South China Sea.

"This is a threat which is now faced by the tur-tle population of Sabah and Trengganu," he said, World sanctuaries for tritles include the three values is and another three vak and another three porth of Sandakan.

Lespite turile conser-

vation measures in Sara-Wak, there has been a ropid decline in turtle population.

#### State's plea

nt.

RM

In Sabah, the State Government has increased conservation activities, Mr. Harrison said in the latest edition of the Borneo Research Bulletin, the biennial publication of the Borneo Research Council.

Mr. Harrison, of the University of Sussex and former curator of the Sarawak Museum here,

stressed the need for greater official support and action to save the turtles.

Sarawak has appealed to the International Union for the Conservation of Nature and the World Wildlife Fund for help

A grant was made last year and other funds are coming in "but the sit-uation is still serious," he said .- Bernama.

# Turtle surprise for Malaccans

MALACCA, Pri \_ Bet-ween 10 and 15 tur-ties have made a surp-rise appearance in the waters off Pengkalan Perigi near Tanjung Ke-ling, 7 miles from here, and the females laid eggs on the beach.

Rampong elders said this was the first time that turtles had landed on the kampung beach and laid eggs.

They believed the tur-

tles had migrated from the Indian Ocean because they look different from the East Coast spe-

One female turtle laid 160 eggs between 10.00 p.m. and 1 a.m. yester-day morning watched at a discreet distance by a crowd among which were the Governor, Tun Dr. Haji Abdul Aziz, and his wife, Raja Toh Puan Teh Zaitun.

# NATURE SOCIETY CRUELTY TO EAST COAST TURTLES

K U A L A LUMPUR, space and guides were Thurs. — The Selan- | being charged. gor branch of the Malayan Nature Society wants part-time "war-dens" to protect the giant leathery turtles against cruelty by spectators in the East Coast.

In an open letter to the Trengganu fisheries and tourist departments, the society said some of its members witnessed such a scene during one of its out-ing to Rantau Abang recently.

The society also sug-gested other improvements to promote the tourist attraction such as better parking faci-lities, information booths and better crowd control.

It said that exorbi-

"On the beach itself, during the process of egg-laying, people form-ed a tight circle around the turtle preventing others from seeing.

"Once laying was completed and the egg-gatherers and fisheries personnel had left, the turtle was cruelly mo-lested."

The society said these problems must be solved especially as more tourists would be visiting Rantau Abang with the proposed MAS flights to Dungun for turtle - watchers next

The society added that it would gladly cooperate in producing an illustrated guide that visitors could buy for information and as a souvenir.

16 Jan

LIBRARY OF GEORGE H. BALAZS

# \$30,000 to save the East Coast turtles

KUALA TRENGGANU, Fri. The State Fisheries Department will spend about \$30,000 next year on the turtle conservation project at Rantau Abang near

Its director, Mr. Slow Kuan Tow, said today the State and Federal Governments and the World Wildlife Fund contributed \$10,000 each.

He said about 100,000 turtle eggs would be transplanted at the hatchery next year.

Since 1971, the de-partment has trans-planted 271,388 eggs at the Rantau Abang turtle hatchery, of which only 141,768 eggs hatched.

#### Tagging

The department is taking other conserva-tion measures, including tagging, to increase the turtle population of East Coast states.

Mr. Slow said there had been no decline in the number of leatherybacked sturtles off Trengganu since the conservation programme was introduced in 1966.

He said nearly 9,000 female turtles had been tagged by the department when they visited the beaches at Rantau Abang to lay eggs. Bernama.

suscitate him. An ambulance was also summon-

Encik Hassan went into a coma and had to be carried down the east gate gallery to the main entrance.

A St. John Ambulance brigade parked at Gate One, had difficulty in reaching him as cars were parked all over the

A city ambulance summoned also could not get to the stadium gate, En-cik Hassan died before he could be carried to the ambulance.

Encik Hassan, a fa-ther of three, was an ar-dent football fan, He lived for soccer and never missed any

match, if he could help it, his family said. "Rain or shine, he will be there," they said. One of them said. "He

must have died a happy man....Watching last last soccer match."

Soccer note: The sta-dium was packed with a capacity crowd of over \$7,000 with more than

4,000 fans standing outside listening to broadcasts over transistor ra-

# Hunt on for 'unknown' species of turtles

THE Malayan Nature Society plans to scan the beach at Tanjong Kling, seven miles from Malacca town, next weekend to in-vestigate reports of turtles of an unknown

> species found-there. Meanwhile; the Soclety has written to the Governor of Malacca, Tun (Dr.) Haji Abdul Aziz who is also the patron of the Society, to find out what the situation is like.

> "It is possible to do some research or conser-vation of these turtles only if they are found in a large population," said the secretary of the so-clety, Mr. The Yow

> Fong.
>
> If they are in small numbers and nest sporadically, it is difficult to do any study on them. he added

> However he thinks that the turtles found on the i-coast of Malacca about a week ago could probably be those of the green species which are found all over peninsular Malaccas. Jar Malaysia.

> "I can only be sure when I've seen them." he added.

he added.

He said there are four species of turtles found in Malaysis. They are the leathery type. mainly found in Trengganu, the green turtle, found all over Malaysia especially in Kelantan, the hawksbill and the ridley.

Tidley.

The turtles were discovered by Raja Toh
Puan Teh Zaitun wife
of the Governor of
Malacca.

The turtles are me-

dium of size, oval in shape and have spots on the flippers.

The eggs are smaller in size compared with the eggs of the leathery turtles of Trengganu,

The society hopes to chtain some findings in a week or two, said Mr. Tho.

# Radiation danger in X-rays: Expert gives an assurance

KUALA LUMPUR, Tues. has an international code of practice which ensures that patients subjected to X-rays are exposed to the minimum amount of

the minimum amount of radiation, British radiologist Mr. EJW. Quick said yesterday.

"We are all aware that X-rays are extremely useful in diagnosis and treatment of a certain diseases but at the same time they can be extime they can be ex-tremely dangerous if misused, he said

That was why the International Society of Radiographers and Radiological Technicians (ISRRT) was insistent that all countries follow codes which are set out. for the safety of patients as well as those who operate X-ray equip-

ment.

Mr. Quick, who is the principal of the School of Radiology of the United Bristol Hospitals in Bri-tain, said there was no danger of excessive

radiation because operators were generally careful

One of the side-offects of excessive radiation was genetic changes but there would have to be "massive doses of radia-tion" before that could happen.

Mr. Quick was in Ma-laysis in 1962 and 1963 as a Colombo Plan adviser to set up the School of Radiology here.

Mr. Quick is one of 14 radiographers from Britain who are among 122 delegates attending the fourth international teachers' seminar or ganised by the ISRRT co-sponsored by the World Health Organisa-

#### Dinner date

Tun Abdul Resak and Toh Puan Rahah will be guests of honour at the Muleyan Em-ployers. Consultative Associa-tion dinner at Hotel Merlin on May 28.

## STREET ROBBERIES

KUALA LUMPUR, Tues. Three youths one armed with a knife, robbed Thai student Mr. Tanes Shinovospol, 24, of 3,000 hahts (about \$350) and a watch in Jalan Tun Perak here on

In another hold-up yesterday, sales promoter Miss Chiow Mooi Mui, 19, was robbed of a \$140 gold chain and \$20 at knife point by a youth in

Page 12

# The Malay Mail

FRIDAY,: JANUARY 17, 1975

# CRUELTY AND OUR TURTLES

CRUELTY to the East Coast giant leathery turtles must be stopped at once. The Trengganu Fisheries Department is spending \$300,000 this year on turtle conservation at Rantau Abang, but the project will achieve no good result if turtles which come ashore to lay their eggs are shamelessly molested.

Increasing the turtle population is not an easy process. Only about 50 to 70 per cent of the eggs transplanted are hatched, the mortality rate of young turtles as they make their way to the sea and when they are finally in the water is high.

Since the conservation programme was introduced in 1960, Fisheries officials can at best say that there has been no decline in numbers.

If turtles are frightened away from our shores, never to return, all these years of patient conservation will come to nothing. The Selangor branch of the Malayan Nature Society's call for part-time wardens to protect the turtles must be given serious consideration.

Fines should be levied on those caught inflicting physical harm or "mental torture" on the reptiles, although it is going to be difficult to define what amounts to

mental torture for turtles.

THE easy availability of drugs is under attack again. People buy from unau-thorised sources and pop the tablets into their mouths without being advised of complications that might arise and side effects that could harm even later generations. Malaysia has legislation to control the drug menace but enforcement is not

No time must be lost in getting the Central Drug Inspectorate organised, and set to work, and the public must be made to realise the dangers of self-medication.



10 ERS :8° es ry at a or in e. ik d

21 April 75 \$30,000 turtle project

KUALA TRENGGANU, at \_\_The State Fisheries Dipartment will spend about \$30,060 this year to hatch turtle eggs in the Rantau Abang area, 27 miles from here

A department spokes-man said today the money would be provided by the Central Govern-ment, State Government and the World Wildlife

Fund.

He added that about 70,000 turtle eggs would be buried in that area under the project Hernama.

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night. on h anecd graph the g The which York later

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#### UNIVERSITY OF HAWAII

Pacific Biomedical Research Center-Kewalo Marine Laboratory

MEMORANDUM

4/21/76

Here is be report and also be report and also be hearspaper clippings. In any the acks again for taking me over to be islands at FFS.

For me it was a tremendowly exciting and productive trip.

If I can be of any help to you at any time, please let me kn ow.

Aloha

bansey.

## Turtles Have Day in Court

NEW YORK (AP) —
"All turtles are created
more or less along the
same lines," three U.S.
Court of Appeals judges
declared.
With this continuent the

declared.

With this sentiment, the court found that one firm's \$195 jeweled gold turtle pin did not infringe the copyright of a \$2,000 gold pin marketed by another company.

There was enough difference in the jewels, weight, shape and other details to tell them apart, the court found.



# NEW YORK ZOOLOGICAL SOCIETY

New York Zoological Park New York Aquarium

Bronx Zoo Bronx, New York 10460 Telephone: (212) 220-5100

Center for Field Biology and Conservation Osborn Laboratories of Marine Sciences

12 September 1977

Dr. Archie Carr Department of Zoology University of Florida Gainesville, Florida 32601

Dear Archie:

I thought you would be interested in the copy of the emclosed advertisement for modern furniture with a tortoise shell veneer -- further proof that the Grand Cayman turtle farm "is not expanding" that market for sea turtle products.

/db Enc.

cc:

P. Scott

E. Baysinger G. Balazs

W. Coerr

R. Fitter

N. Mrosovsky

do return

#### -- ITEMS OF INTEREST--

\*\* Dr. Beverly Goven conducted a course on fish diseases recently at Texas Wesleyan College for hobbyists, wholesalers, retailers, and the staffs of the Dallas and Fort Worth aquariums. The course included data on disease diagnosis and treatment. A second workshop is planned. Information is available from: Dr. Beverly Goven, Texas Wesleyan College, Fort Worth, TX 76105. (Pet Business)

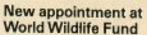
- \*\* A Selected List of Collections is currently available from the Archives of the Scripps Institution of Oceanography, along with a photograph file and film holdings. For more information on the collections, contact: Ms. Deborah Cozort, Archivist, Scripps Institution of Oceanography, Mail Code C-075C, University of California, San Diego, La Jolla, CA 92093, 714-452-3274. (Announcement)
- \*\* Salmon ranchers have been concerned about the low survival of their smolts after they have been released into the ocean. Research is now underway to investigate the hormone levels that may help to improve both fish and dollar returns. By measuring the level of thyroid in the blood of juvenile salmon, it is possible to predict the correct time for transferring the smolts from fresh to salt water. Use of hormones: may also help in the stimulation and acceleration of spawning in adult salmon. (Sea Grant Today)
- \*\* A listing entitled RECENT NOTABLE INDIAN WORKS ON FISHERIES AND MARINE SCIENCES is now available. For information, contact: D. K. Agencies, H-12 Baji Nagar, NEW DELHI, India 110015. (Announcement)
- \*\* The Registry of Comparative Pathology has published a new directory, "Resources of Biomedical and Zoological Specimens." The directory lists 114 collections located in the United States and foreign countries. A free copy of the Directory may be obtained from the Registry of Comparative Pathology, Armed Forces Institute of Pathology, Washington, D.C. 20306. (G. Migaki)
- \*\* A dozen Atlantic green sea turtles hatched recently at the Miami Seaquarium,
  marking the first time that this species has been conceived and hatched outside their natural habitat. They are scheduled to be released next spring in the Atlantic ocean off Cape
  Florida State Park. (AAZPA Newsletter)
- \*\* A treatment process required by the EPA to remove trihalomethane (THM) from munipal water supplies has caused a series of fish kills in the Miami and south Florida area. The removal of THM is most effeciently removed through the addition of liquid anhydrous ammonia, which then combines with the chlorine present in potable water to form chloramines, which in sufficient quantities can be lethal to fish, reptiles and other animals. The kills which in sufficient quantities can be lethal to fish, reptiles and other animals. The kills are reported largely from the tropical fish industry who use potable water in their systems. This removal process has been used in other areas without incident, but in south Florida This removal process has been used in other areas without incident, but in south Florida greater quantities of chlorine must be used to eleminate the color of the water, hence greater quantities of chlorine must be used to eleminate the color of the water, hence causing a higher concentration of ammonia in the treatment process. This causes a higher level of chloramines to be produced, which is the lethal agent, to a level on the order of five ppm. (Pet Business)
- \*\* The course, Diagnosis and Treatment of Diseases of Warmwater Fish, will be taught at Mississippi State University, May 17 to 28, 1982. The course is designed to provide instruction in the methods of diagnosis and treatment of the diseases of warmwater fishes, college credit may be awarded, and the tentative tuition is \$16h. The deadline for registration is March 1, 1982. For information, contact: Dr. Wellborn, c/o Coop. Ext. Serv., P.O. Box 5405, Mississippi State, MS 39762. (FCS Newsletter)
- \*\* The electrical device reported in this column in Vol. 13, No. 1, is the G. R. Torry Meter and is manufactured in Pertshire, Scotland. Largely intended for use in the marketable fish industry, it can be used to test for the relative freshness of expired specimens and has been suggested as a useful autopsy tool. In addition, it has also been

# News Desk

GEORGE H. BALAZS

comments that 'since Azodrin can be obtained by farmers for authorised purposes it is not always possible to prevent misuses'

The ICBP reports that in the United States the herbicides 'Atrazine' and 'Linuron' are widely used to control weeds. In the state of Maryland, Atrazine is used on about 95 per cent of the corn crop, while Linuron is used on 50 per cent of the soybean crop. When these herbicides run off into Chesapeake Bay they accumulate in the bottom sediments and adversely affect the bay's aquatic plants. In turn, this affects fish and waterfowl. The grasses 'nurture the larvae of fish and a host of other organisms, shelter crabs, and provide fertile hunting grounds for larger fish'. The grasses also provide food for large numbers of migrating waterfowl and serve as wave filters to protect the shoreline from erosion. A simple, if alarming, tale of cause and effect. But what is particularly disturbing is that, as ICBP points out, 'the findings throw into dispute air attitude prevalent among agriculturalists, many scientists, and environmental officials, that the current generation of agricultural chemicals, unlike DDT and other predecessors, degrade so rapidly in the soil that there can be no significant run-off.



George Medley took over at the beginning of 1978 as director of the British National Appeal of the World Wildlife Fund. He came to WWF on completion of his contract as managing director of Glaxo Laboratories, India. George Medley, who is 47, was educated at Winchester College and graduated in biological sciences from London University. His career has included running his own fruit farm in Somerset and a number of years in the agro-chemical industry, during which



A happy event took place in Bermuda last October — sixty loggerhead turtle eggs hatched, marking the island's first successful attempt to breed turtles in captivity. Shown above, holding some of the baby turtles, are David Wingate (left), Bermuda's conservation officer; Pam Groves, who helped with the project; and Kirk Kitson, manager of Devil's Hole where three turtle species are kept. Turtles disappeared from Bermuda's beaches over fifty years ago, and since 1965 attempts have been made to re-establish the lost populations. Following hatching failures, the

last clutch of 114 eggs were transferred from the artificial beach specially constructed at Devil's Hole to an incubator — where over fifty per cent hatched

he travelled extensively in the Far East, the Americas, and Europe. He is a past chairman of the London Business School Association.

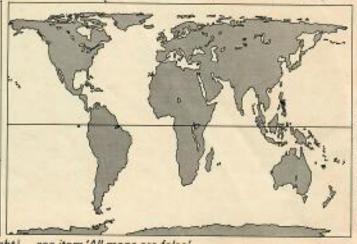
#### All maps are false, but some less than others

All world maps are inaccurate, unless\* they are drawn on a globe, because it is

a mathematical impossibility to flatten a sphere without deforming it. But we tend to accept the view of the world designed by the Flemish cartographer Gerardus Mercator, largely because we have lived with it for some 400 years. Mercator's map is basically the projection of points of the earth onto an imaginary cylinder surrounding the earth at the equator. Unfortunately,



on Haftland Dr. Arms Dates



drawn by lan Wellington

# **News Desk**

wide range of wildlife as well as humans) linking one isolated community with another. Finally, green lanes are often sites of unusual species. This stems from their antiquity, undisturbed nature, and freedom from pollution and agricultural sprays. Hedgerows and ditches afford shelter and cover, while the presence or absence of standing water can be very important.

Many green lanes are under serious threat, despite having survived centuries of use and alteration. Problems today include encroachment, re-designation by local authorities (in terms of rights of way), drainage, pollution, and ironically - in some cases - under-use. In order to locate and protect the best green lanes, the Hertfordshire and Middlesex Trust for Nature Conservation has launched a survey of those remaining in Hertfordshire lonly a small portion of Middlesex remains free from urban development). This seems a very good idea, and one that other county trusts could usefully copy.

#### International conference on the Mediterranean monk seal

The First International Conference on the Mediterranean monk seal will be held on the island of Rhodes on 2 May 1978, under the auspices of the Greek Ministry of Agriculture and the Faculty of Biological Science of the University of Guelph, Canada. Further information can be obtained from Mrs Jane Selley, College of Biological Science, University of Guelph, Guelph, Ontario, Canada.

#### Japanese whalers up to no good - again

Readers will be familiar with the way in which Japan's whaling industry rides rough-shad over world public opinion in its continued slaughter of the great whales. However, the Japanese do at least normally pay lip service to following the advice and procedures of the International Whaling Commission (IWC). That much maligned body is at the moment the only regulatory agency dealing with whaling, and the Japanese and other whaling nations claim that the IWC can and does conserve whale stocks. However, not all whaling nations are members of the IWC, which lowers its credibility.

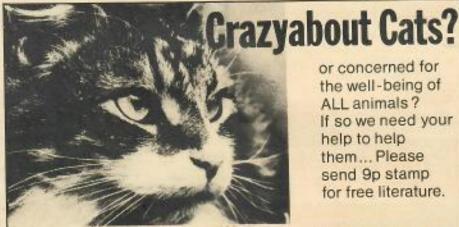
Evidence of Japan's real attitude towards whales and whaling, and even the IWC which it pretends to support, lies in the notorious history of the whaling vessel M/V Sierra. This boat is owned by Japanese interests and used to operate in African waters, first from Angola and later from Somalia. When

of Animals (ISPA) denounced this operation, the Sierra was hurriedly re-registered in Liechtenstein under a flag of convenience. ISPA now reports that the Sierra has once again changed allegiance and is flying the flag of Cyprus. This vessel, originally named the M/V Run, and operating in South American waters, apparently changes her name and registration at will. ISPA comments: 'How else can one view the activities of such a vessel except with the gravest suspicion?"

#### Insecticide effects reported in Israel and US

The latest edition of the admirable 'President's Letter' of the International Council for Bird Preservation (ICBP)

reports two cases of adverse effects. from insecticides. In Israel, the organophosphorous insecticide 'Azodrin' was used to control the Levant vole, which feeds on alfalfa, in the northern Huleh Valley, Large numbers of raptors and owls which had been feeding on the voles were killed, and many other birds were also affected, including pipits, wagtails, larks, thrushes, chaffinches, buntings, and lapwings. They had been feeding in the alfalfa fields. An unfortunate aspect of the story is that apparently the original label on Azodrin contained a warning about the dangers to wildlife but this warning did not appear in the Hebrew translation. It is now illegal to use Azodrin on alfelfa fields, but the Israeli Ministry of Agriculture



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# CRUSADE AGAINST ALL CRUELTY TO IMALS Dept. A. Avenue Lodge, Bounds Green Rd., London N22 4EU



#### The World Conservation Yearbook

#### **Edited by Nigel Sitwell** With a Foreword by Thor Heyerdahl

Fifth annual edition of this important book, a follow-on to Wildlife '76 but with a different title. Completely new contents as usual, this year including the tiger, endangered deer, bats, the osprey in Britain, vanishing fish stocks, the desert pupfish, Australian parrots, Spain's threatened ilex woods, the Iriomote cat.

Available through Wildlife Magazine at £3.70 (B309 - see page 141)

#### GEORGE H. BALAZS

#### FY.I.

ries and calendars, photography collections (one attempts to pictorially catalogue a runner's "altered states of consciousness"), travel guides (where to run when running away from home) and even a cookbook or two. Assorted miscellaneous volumes-such as those on sneaker selection and the cure of various foot disorders-will follow on the heels of all these jogging titles, as will the inevitable parodies and nonrunner guides. One of the latter-a celebration of the sedentary-is dedicated to Calvin Coolidge whose famous words, "I do not choose to run," sum up the book's philosophy.

Studies have shown that the runners among us are a well-educated, well-read and well-paid lot. In view of the plethora of books that are bombarding them this season, they had better be discriminating as well—lest someone else take the money and run.

-SUSAN C. SHIPMAN



#### ENVIRONMENT

Poached Eggs Mexicali Style

If you were a turtle languishing in a neglected bowl in, say, Boise, Id., you might imagine that life would be beautiful if only you'd been born into the free life at sea. But for at least one species of turtle, you'd be wrong. The Altantic Ridley, as free and natural as a turtle can get, is presently suffering from severe trauma out in the deep.

For millennia, the Ridley has lived a simple life. Each spring the giant mother turtles climb out of the water onto an isolated beach near Tampico, Mexico, to mate and nest. The Mexicans call this the arribada, or arrival.

In the Forties, as many as 40,000 turtles were sighted in one arribada, but by last year the turnout was down to 200. The reason for the decline: The Mexicans worship the sea turtle eggs for their supposed aphrodisiac charms,

When the mother Ridley retires to her bed of sand after laying hundreds of golf ball-size eggs, Mexicans invade the beach, loot the nests, and make off with truckloads of the fresh eggs to sell.

However, marine biology is coming to the rescue. Scientists south-of-theborder are scooping up the "golden" eggs and incubating them in corrals. At present, close to 80,000 of the precious eggs are being guarded by armed Mexican marines.

continued on page 18



#### FYI

More Wings to Fly

If there's one thing international travelers found out this past summer while waiting around airports, it's that air travel is definitely soaring. Never before in the history of aviation have airlines carried so many passengers and made so much money. And our busy skies are about to get even busier, but this time the passenger is going to be happier - and richer-because of it.

With the new air charter regulations adopted by the Civil Aeronautics Board and President Carter's new air policy aimed at stirring greater competition among world airlines, the cost of getting from here to there will be a lot easi-

er on the pocketbook.

To go the super cheap way, you won't have to pay for it anymore with your peace of mind. Charters won't be so fraught with conditions - no advance purchases necessary, no minimum stay, no minimum group size. For the reserved seat traveler, Carter's new policy will mean cheaper seats all around (the cost of flying to Israel on El Al has already been cut 28 percent this month), and there'll be more flights abroad from U.S. cities.

We call that points for the passenger.

Table Hopping through France

For the well-seasoned traveler who's been just about everywhere east of Nirvana, a host of highly specialized tours, sometimes bordering on the bizarre, have been springing up over the past few years to show the worldly that there is in fact something new under the sun. We've seen junkets for the gambler which hit every European city housing a casino, intensive tours for the art maven which pack into one week as many galleries and museums as your blistered feet can bear. And now, for the more sedentary among us, there's a way to eat your way through the villes of southern France.

"The Ultimate Gourmet Adventure" offers a series of one- or two-week tours to the French Riviera where you can do everything your little palate desires-dine in the three- and four-star restaurants of the grand hotels, learn how the top French chefs whip up their famous tartes aux pommes or native bouillabaisse, visit the home of Simone Beck, acclaimed expert on French cooking, and watch her create what is reputed to be the unsinkable soufflé.

Between your eight-course meals and cooking lessons, you might find time to catch some rays on the pebbled beaches and, if you can pull yourself away from the table, you might take to the green felt ones in the casinos at Cannes and Monte Carlo.

Interested gournets can write the World of Oz, 3 East 54th St., New York, N.Y. 10022 for more information or call toll free (800) 223-6626.

Turtle Xing

More often than not, it seems that one of the conditions to holding public office is an innate inability to hear the cries of the public. But not so in Wethersfield, Conn., where Ralph A. De-Santis holds the post of town manager.

Elaine Segada, a 13-year-old Wethersfield resident, wrote to DeSantis about the turtle crossing problem. It seems that they were getting "squished" as they made their way across Highland Street-something, unfortunately, that is apt to happen to turtles when crossing busy thoroughfares. But Elaine had the solution:



"Why can't there be turtle crossing signs, since there are deer crossing signs?" the youngster wrote. Mr. De-Santis looked into-and at-the matter and decided that, indeed, something should be done. As a result, there are now "Turtle Xing" signs posted all along Highland Street.

As DeSantis later told Elaine, town officials "always appreciate good suggestions from our citizens."

We have it on very good authority that the turtles of Wethersfield are in wholehearted agreement.

Buckled Up

For those of us who regularly put in time traveling on airplanes, the FAA has come up with a new rule that, if enacted, will make your trip a bit safer, albeit a lot more uncomfortable. In effect, the rule will say that passengers must remain in their seats, with belts buckled, during the entire flight. Under the proposed ruling, the only way you'll be able to leave your seat will be to go to the bathroom-or with the individual permission of a flight crew member (and by flight crew member, they mean the pilot, copilot, engineer or flight attendant). The theory is that the new rule, if strictly enforced, will all but eliminate injuries due to unexpected clear-air turbulence.

Was there a problem? Well, it depends on what you call a problem. When we asked Ed Slattery, director of public affairs for the National Transportation Safety Board, about the number of people injured because of turbulence, his answer was surprising: "In 1976, five passengers and three cabin attendants on domestic flights were injured while walking around in planes caught in air turbulence. In 1977, 12 passengers and six attendants were in-jured." Out of how many people, we asked. "In 1976, there were 206,274,000 passengers on domestic flights; in 1977, there were 222,283,000." In short, for the year 1976, .00000003 percent of the passengers got hurt; in 1977, .00000008 percent of domestic passengers were injured because of unexpected turbulence. We were, to say the least, very confused.

"The Board thinks the new proposal is worthwhile because, although the above figures may indicate a small percentage of people injured," Slattery explained, "the potential for much greater danger is there. Planes are getting bigger and bigger and carrying more and more passengers, so the number of injured could go up. Also, while the above numbers for injured travelers are about the average, in some years we've had the startling figures of 25 to 30this is usually because a lot of people got hurt on one plane when it hit particularly bad conditions.

"This rule," Slattery continued, "is for the passengers' own good and not continued on page 12

# CHINON

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#### FY.I.

continued from page 11

anyone else's. We're not dealing with a classroom of children—the passengers are adults, but sometimes they act like children when they ignore the signs to fasten their seat belts...if the proposal is adopted, it will hopefully reduce the number of people just casually walking around the cabin."

Perhaps. However, as a spokesperson for Pan Am pointed out, captains and flight attendants already urge passengers to remain in their seats at all times and, when seated, to keep their seat belts fastened. "We already have the FAA rule in use in a kind of de facto

way," he explained.

In the meantime, how are passengers—who are what the airline industry is all about—liable to react? One airline official, who asked not to be named, put it this way: "Personally, I think it's obvious that passengers aren't going to like this ruling. How would you like to be told you have to stay in a seat for umpteen hours on a long flight? And how will the airlines enforce it; if a passenger wants to get up, are the stews going to shove him back into his seat?"

#### Table Talk

 The daugther of Bryan Forbes, Dame Edith Evans' biographer, when told the 88-year-old actress was reaching the end of her life: "No, I don't think she'll die. She's not the type."

 Russian journalist Anatoly Krasikov on President Carter's banning the sale of a computer to Tass, the Soviet press agency: "With or without a computer we will continue to rebuff quickly all your attacks and efforts to distort

Soviet policy."

 The chairman of the annual Republican fund-raising drive, after inviting President Carter to serve as its honorary chairman: "I have made this choice because President Carter is the best friend and most effective fund-raiser the Republican party ever had."

 Senator William Proxmire on an \$84,000 science grant to study the differences between passionate and compassionate love: "No one—not even the National Science Foundation—can argue that falling in love is a science. But also I'm against it because I don't want an answer."

Readers are invited to submit Table Talk quotes to F.Y.I.Signature Magazine, 880 Third Ave., New York 10022.

# SIGNATURE

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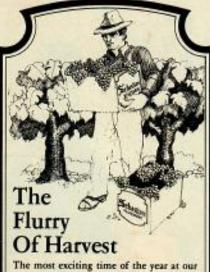
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## **LETTERS**

#### A Quiet Ride

Honolulu, Hawaii
"The Sound of Music" [F.Y.I., August
'78] has prompted this letter. MTL, our
local bus line, owned by the City and
County of Honolulu, managed to get
an ordinance passed that prohibits the
playing of radios or musical instruments on the bus. It can be done if
enough hell is raised.

Carey S. Cowart

#### A Meaty Issue

Melan, Ind.

Since my husband and I have been in
the meat-processing business for some
30 years, I just can't help but comment
on your August F.Y.I. entitled "The
Meat of the Matter."

We were brought up in the meat business when the only equipment we had was a knife, hand saw and a small grinder and slicer. The rest was done by hand.

It seems that every time the meat industry gets a new piece of equipment to make their job easier, we cannot find good skilled people to get the job done. The government hires more state or federal inspectors to inspect something that they know nothing about.

We have seen the machine that separates the meat from the bone and see nothing wrong with it. There will be no more bone in a product using this machine than if it were boned by hand. I wouldn't worry about the machine so much as how much meat is being sold without inspection of the line carcass. Every establishment that sells meat should have a skilled inspector in it. That is not what we have now. Taxpayers pay plenty for inspectors who have two weeks' training. In 30 years we have learned a lot.

As for Assistant Secretary of Agriculture Carol Tucker Foreman, I would like to know why she endorsed Dr. Michael Jacobson for the Cadex team in Roam to represent the meat industry you guessed it—Dr. Michael Jacobson is a vegetarian.

Mr. and Mrs. Ed Allgein

#### A Frustrated Gourmet

Miami, Fla.
Being a travel writer and a lover of good food, I will go almost anywhere in search of a fine or unusual meal. So, after reading "The Masterful Magicians

of New Orleans Cuisine" [August, '78], my wife and I packed our bags and headed for New Orleans for the third time in four years hoping to sample some of its allegedly great food.

Regarding Broussard's, which Mr. Chandler praises highly in his article, we had been looking forward to two items specifically mentioned by him: the oysters Burton and the chicken Hawaiian. To our disappointment, neither was on the à la carte menu, and our waiter seemed totally unfamiliar with such house specialties. So we opted for other choices, beginning with oysters Rockefeller and oyster soup, both excellent. Then my wife tried the turtle soup Creole, which turned out to be too rich and over-condimented, particularly with a sharp-tasting local herb which my well-traveled palate has so far been unable to identify. The main course, Cornish game hen Louisiana, was broiled too dry and the sauce again overseasoned. (Paul Bocuse would have had a fit.) For dessert, the crêpes Suzette were passable (the crêpe texture too thick) and the lemon ice quite good. A 1976 Polignac Montrachet compensated for a rather uneven meal.

As to the "calas" described at such length by Mr. Chandler in his article, we first inquired about them unsuccessfully from various gourmet friends in New Orleans. Then, on our last morning, and quite by accident, we found them on the menu of an unpretentious little place called Maxcy's Coffee Pot (714 Rue St. Peter). I have tasted similar rice fritters of African origin in Bahia, Brazil, and some Caribbean islands, so they turned out to be rather anti-climatic.

Perhaps I have been unlucky to have experienced similarly disappointing meals on my previous visits to the capital of Creole cuisine.

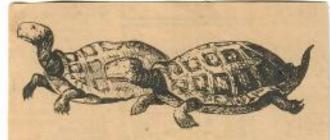
Luis Zalamea

#### Over the Border

Kansas City, Mo.
The Travel and Dining section of the
Midwest edition of your August issue
places the Savoy Grill in Kansas. For
over 75 years it has been in Missouri and
we are proud of it.

Alyce G. Weston

Editor's note: Our apologies. The Savoy Grill is indeed in Kansas City, Missouri.



# Mexico Turtle Slaughter Threatens The Ridleys

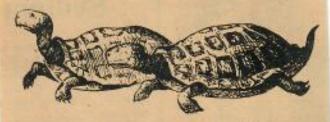
"An odor of death and putrescent meat rises up from the hills. Animal bodies are piled four and five deep, left to rot under a blazing sun. As many as 50 vultures pick at the purple and black meat. There is also an immense pile of eggs—the next generation—covered with maggots and flies; a heaving mass of hissing malevolence."

As horrible as this description is, it may not be strong enough to describe the scene of slaughtered turtles to be found near a beach called Escobilla, on the west coast of Mexico. The turtles are dumped in this rotting grave by a company called PIOSA.

PIOSA operates a slaughterhouse, plus a laboratory intended to preserve the species, known as Pacific Ridleys, by putting new hatchlings into the sea. But when Outside magazine's Tim Cahill arived in Escobilla, he allegedly found the slaughterhouse in full operation, but the lab left to ruin. And so the endangered Ridleys move closer to extinction.

"For the first time since anyone could remember at the beach," reports Cahill, "there was no October arribazon (the annual mass nesting of the Ridleys on the beach to lay their eggs).

"Only 90 million years of evolution going to waste on the beach at Escobilla." Mexico's turtle slaughter



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"Only 90 million years of evolution going to waste on the beach at Escobilla."

Desert Sun Palm Springs, Calif. Saturday June 17, 1970

Wednesday, February 15, 1978

The NAPA REGISTER-39

# I drues to make comeback

Hopes run high as 5,000 'babies' are freed off Kelantan coastline

By SHUKOR -RAHMAN-

GREEN turtles which stopped coming up in large numbers to lay their eggs on the beaches of Kelantan over the last two decades may make a comeback in the next few

Recently, the Kelantan Fisheries Department released 5,000 baby turtles in Pantai Melawi, Pan-tai Kemasin and Pantai Senok in Bachok district, Pantai Cerang Ruku in Pasir Puteh district, and Pantai Kundor in Kota Baru district.

The "babies" The "babies" were only three or four days old when released. This conservation pro-gramme will be carried out every year during the turtle egg-laying sea-

son. "There is no guaran-tee that the turtles released may come back to the same place but there is every likehibood that they may do so," said State Fisheries Director

State Fisheries Director Mr Gan Bon Hua.

"In any case, what-ever turtles are lost to Kelantan may be gained by Trengganu," he pointed out.

The department in-tends to start a turtle

tends to start a turtle



Baby turtles being released at Pantai Melawi in Bachok. If not guarded as they are freed, they are easy prey to swooping birds before they can reach

hatchery next year. No site has yet been chosen but it is expected that the hatchery will be located at either Gerang Ruku or Senok Tawang.

#### Disappeared

A turtle hatchery had been started in Kelantan at Kuala Semerak in 1969 as part of a conservation effort but this was effort but this was stopped in 1973, the rea-son being the de-partment was having a staff shortage.

The giant Green
The giant Green
Turtles at one time frequented Kelantan
beaches from Kuala Tabal in the north to Kuala
Semerak in the south but
he 1989 they had disap-

Semerak in the south but by 1969 they had disap-peared almost totally. Like Dungun in Trengganu, the beaches of Kota Baru, Tumpat, Bachok and Pasir Putch were famous as a turtle egg-laying area. A major factor which

caused the disap-pearance of Green Turtles was the in-discriminate manner by which licensed collectors Green gathered and sold as the furtle eggs. They took all they could lay their hands on.

hands on.

The State Government had to launch a conservation programme under which fresh turtle eggs were bought from collectors and hatched.

#### The species

In Malaysia, four species come ashore on both the East and West coasts of the peninsula. They are the Leathery

They are the Leathery Turtles (Dermochelys Coriacea), the Green Turtles (Chelonia Mydas), the Ridley (Lepidochelys Olivaces) and the Hawksbill (Chelonia Imbricata).

The most common on the East Coast are the Leathery and Green Turtles. The former come up exclusively on the 12-mile stretch of Rantau Abang beach in

Rantau Abang beach in Trengganu.

Rantau Abang is one of three areas in the world where Leathery Turtles come ashore to lay eggs. The other areas are Suriham and French Guiana in South Gulana in South

America.

The Green Turtles used to be very common in Kelantan. The Ridleys are not common as they do not tend to congregate in any particular area. The Hawksbills are rarely found and may be fac-ing extinction.

#### Optimistic

But Mr Gan is opti-mistic about the situ-ation in Kelantan be-cause of the new Fish-eries (Turtles and Eggs) Legislation 1978 which was passed by the State

Assembly recently.

"The old enactment was not very effective to deal with today's situation and developments.
The new regulations possesses. The new regulations now cover more aspects in-volving the turtle," ex-plained Mr Gan.

Among other things, the new enactment has provisions on the protec-tion of turtles, collection of their eggs and preven-tion of cruelty to them.

Feetnete: The Green Turtle is distinguishable by its greenish brown to brown colour and its fairly large size - about four feet long. It may weigh up to 400 lb.

Due to its diet, the Green Turtle is found in shallow seas where there is enough light for plant growth. It is predominantly a vegetarian except in the first year of its life when it is omniverous. nivorous.



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had something for breakfast that day that didn't agree with him. Let us hope so and be thankful that he realized, however belatedly, that his future lay in areas other than administration of public lands.

> Bill Kirby Fairfax, Virginia

WE'RE DEALING with a madman! After visiting Ed Abbey's home in Wilmington Hole, Arizona, a friend recounted to me his horror upon finding a toy doll savagely torn into three parts and skewered on a fence post in front of the author's barren lawn.

Now, Outside is a real nice magazine. To insure the future success of your lovely periodical I would suggest that you cease printing the writings of such a deranged, primitive, sick, uppity barbarian. He could, after all, blow up something like that big dam down in Utah. And then I'm sure you wouldn't want his name in your nice magazine. Would you? I.E.M.

Denver, Colorado

#### Turtle Scoop

RECENTLY I HAD the opportunity to read "The Shame of Escobilla" [February 1978]. I want to commend you for preparing and publishing your observations and findings on this dismal situation. The information you have presented should be valuable to turtle conservationists and, hopefully, help to slow the decline.

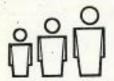
George H. Balazs
associate marine biologist and
member, IUCN Turtle Group
University of Hawaii at Manoa
Kaneohe, Hawaii

"THE SHAME of Escobilla" was a forceful story whose truth would bring any life-respecting person to tears. Unfortunately, sea-turtle slaughter is not restricted to Mexico, but also occurs in the United States, although not in such great numbers. Perhaps because this killing is more "subtle," the public remains uninformed, and those who know choose to ignore it.

For the past three years, I have studied a nesting population of loggerhead sea turtles (Caretta caretta) on one of the off-shore islands of southern Georgia. The breeding season occurs from May through August, which is approximately the same period when the shrimping industry fishes coastal waters most heavily. The major







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cause of adult mortality during the breeding season proves to be drowning in shrimp nets. Last season alone a total of 70 dead turtles were washed up on three islands in this area, a frightening figure when the entire breeding population for this area has been estimated at approximately 1300 to 1800 females. This number becomes even more tragic when one sees the egg poaching that occurs. Under conditions where man is not a major predator, only about one out of every 300 hatchlings will survive to maturity, but with efficient poaching this number is reduced drastically. This will eventually lead to species extinction.

The problem is surely grave enough to warrant federal protection for this as well as other species of sea turtles. Once the loggerhead is on the Federal Endangered Species List, poaching laws can be more rigorously enforced. We must act now. Write your legislator, volunteer for sea-turtle patrols, but let your voices be heard.

Sally C. Litwin Newark, New Jersey

TIM CAHILL'S article on sea turtles is right on. Unfortunately, the situation is even worse than he reports. With the exception of those in Australia, all six species of sea turtles in the world are in imminent danger of extinction. Cahill witnessed the last stages of the liquidation of Mexico's great sea turtle herds. If their reprieve does not come before the next breeding season—summer 1978—turtles will disappear from Mexico's seas within three years.

RICHARD S. FELGER
KIM CLIFFTON
DENNIS CONEJO
Research Department
Arizona-Sonora Desert Museum
Tucson, Arizona

The Mexican media are now covering the turtle controversy, and it is time for American preservationists to speak out. The best and most direct action is to write directly to Mexican president Jose Lopez Portillo at the National Palace, Mexico 1 D.F. The letters must be respectfully worded. They should state that all objective evidence indicates that the Pacific Ridley turtle population on the west coast of the state of Oaxaca is faced with total destruction. A ban on all fishing during the nesting season must be imposed immediately and not lifted until reasonable harvesting quotas can be set. These actions are necessary in order to preserve the turtles as a resource for future generations of Mexicans.

-THE EDITORS

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# L E T T E R S

#### Tears for the Turtles

THANK YOU for Tim Cahill's incredible story about the Ridleys' slaughter in Mexico ["The Shame of Escobilla," February 1978]. I cried all night.

Please publish Antonio Suarez's address. Our food co-op has some information for him. It's about the benefits of being vegetarian.

> KATHI MILLIMET THOMPSON Moscow, Idaho

AFTER READING Tim Cahill's excellent article I too was overcome with emotion. First we read about the slaughter of the whale, then the killings of the harp seal pups, now this. If Darwin found out he would probably turn over in his grave.

> ED KROL Lakeview Terrace, California

I WAS REPEATEDLY sickened and distressed to the point of tears as I read your piece. I think pressure should be applied to the Mexican government to close down the "laboratory" at Escobilla.

JODY JOHNSON Miami, Florida

HAVING RECENTLY RETURNED from a fact-finding mission to Puerto Ángel, I found your article extremely interesting. When I was there in late November, they were still killing 500 to 700 turtles per day, and every one was a female containing eggs—perhaps they were massing together for a final arribazón of the season.

The feds say that they will clamp down and close the season if the turtles show a diminution in number. Unfortunately, it may be too late then. The Kemp's Ridley on the other coast has shown no recovery after a decade of full protection.

PETER C. H. PRITCHARD, Ph.D. Vice President, Science and Research Florida Audubon Society

Outside and a number of conservationist organizations are currently working on methods of ending the slaughter at Escobilla. We will follow up in the next issues with specific information on what you can do to help.

-THE EDITORS

#### That Was Mexico

"GRINGO NOTES" [January 1978] could have been written by any of a thousand young, stoked 1960s surf freaks, but it wasn't. It was written so well that it made me want to leave my snowbound paradise and go directly to Hussongs and get drunk. I guess for most of us that was Mexico — surf, youth, drinking and countless other experiences only Mexico could have provided. Thanks for the memory.

Ron DanLouist Steamboat Springs, Colorado

"GRINGO NOTES" is just beautiful tight, ironic, restrained. It's rare and delightful to find writing like that in environmental magazines—and I ought to know.

DAVID GANCHER Managing Editor, 'Sierra Club Bulletin' San Francisco, California

#### Greetings from Bangtown

CHARLES PERRY'S "Postcards from God's Country" [March 1978] was full of the most repellent indirect boasting about the size of his local produce and game. Typical laconic frontiersman tall-tale bullshit. Children in Vietnam died because of this vicious mythagogy. Our streams and skies are polluted with this "more is better" thinking. Violence on television, lung cancer, the rising incidence of rape—it goes on and on.

On top of everything else—and this is the capper—God's Country does not even have the biggest game. Witness this snap of my cousin Ray with a rainbow fingerling he caught near his home in Bangtown, Idaho. I put it to you.

Name Withheld by Request Pawtucket, Rhode Island



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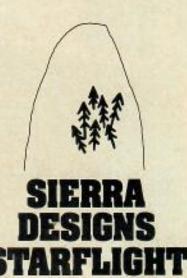


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OUTSIDE April 19

chair say, 'State government is here to serve the mining industry' (gives me chills), 'eqc needs a firm, guiding hand' (meaning, let's gut its authority to regulate anything), and 'All public land should be given to the individual states.'

These candidates say we must dig it all up tomorrow-and to hell with the dickey-birds and wild places-or we will fail in our obligation to supply energy to the rest of the country. I can't believe that Wyomingites will buy this nonsense.

On another front: in the April, 1976, Defenders I wrote about Wyoming's Red Desert and the Bureau of Land Management's forthcoming as that would determine the future of the largest single expanse of sagebrush, grassland steppes in North America. At public hearings in July, everyone, including State Game and Fish, wildlife interests, recreationists, livestock people, etc., trampled BLM's proposal to manage the desert and the Sandy area (2 million acres) by constructing 550 miles of fencing and locking everything into a rest-rotation grazing system.

The voice of the people came through loud and clear. In the next few months

we will learn if BLM listened.

The Red Desert presents an intricate ecosystem, a land of uninterrupted diversity. Forces that would destroy the system are already moving. For this reason, several groups have formed a coalition named Citizens for the Survival of the Red Desert, of which I am chair-

Our first act was to nominate several parts of the desert for inclusion under the State Land Heritage Act. We have been working with BLM toward 'natural area' status for parts of the desert but this is a long, tedious process. The Land Heritage mechanism is much faster, and we don't have much time to lose.

Hearings will probably begin in October. We must prove to the state that the areas we nominate are unique, irreplaceable, state treasures. This is really a now-or-never situation; the stakes are beyond comprehension. So far, we have scheduled a show-and-tell tour of the desert and have invited the press and the broadcasters.

So my desk is piled with environmental impact studies that must have comments, and just this morning I learned an oil company plans to blast a road through the cliffs of Cedar Canyon, a critical nesting area for raptors.

But meanwhile, the National and Wyoming Woolgrowers magazines have slapped John Grandy and me for our involvement in the predator hearings. We must be doing something right.

–Dick Randall

by Michael Lipske, DEFENDERS Staff

# Washington Outlook

# Commerce and Interior relent, list three species of sea turtles

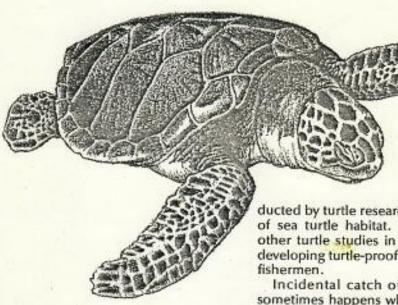
It took 51 months of pushing by the public, but officials at the Departments of Commerce and Interior were at last moved to list three species of sea turtles as endangered or threatened.

The green sea turtle was listed as endangered in Florida and along the Pacific Coast of Mexico, and threatened elsewhere; the olive ridley as endangered along the Pacific Coast of Mexico, and

'That's going to be our next big fight with NMFS (the National Marine Fisheries Service, part of Commerce), to force them to declare critical habitat,' said F. Wayne King, a director of the New York Zoological Society, who petitioned the Secretary of the Interior to list the turtles back in 1974.

October 1978, 201 53 = 5

However, NMFS is spending \$50,000 this year on a continuing survey, con-



threatened elsewhere; the loggerhead simply as threatened.

The turtles were proposed for protection in April, 1974 (see 'Sea Turtles Suffer as Bureaucrats Bicker' in the August 1977 DEFENDERS). Why did it take more than four years to list them? 'I'm afraid you'd have to ask the politicians that. The biological data has been there all along," replied Ken Dodd, herpetologist with Interior's Office of Endangered Species.

In the final agreement between the two agencies (each of which has some jurisdiction over sea turtles), Interior takes responsibility for turtles on beaches, Commerce for turtles in water. Commerce, which has been credited with much of the foot-dragging on the turtle listing, is not expected to rush to declare critical habitat that would protect turtles offshore.

ducted by turtle researcher Archie Carr, of sea turtle habitat. The agency has other turtle studies in progress, and is developing turtle-proof trawls for shrimp

Incidental catch of sea turtles, as sometimes happens while trawling, is a crime if the turtle is considered endangered. New regulations declare that any trawler-netted turtles must be kept above decks at all times, and, whether dead or alive, returned to the sea. 'Comatose' turtles must be turned on their backs and revived by pumping their plastron, said Ken Dodd of Interior.

A proposed exception to the regulations to allow turtle farms, like the Cayman Turtle Farm Ltd., on Grand Cayman Island, two years to develop self-sustaining operations, was not granted. Turtle farming at present usually consists of taking eggs from the wild and hatching

them in captivity.

Carleton Jones, a lawyer with the Washington firm that represents Cayman Turtle Farm Ltd., said alternatives were being studied: 'We intend to petition for reconsideration.' And, might they sue? 'That,' said Jones, 'is an active possibility."

#### First Assessment Of Predator 'Control' Due in December

In mid-December the Interior Department will release a final environmental impact statement on its Animal Damage Control Program, the first such evaluation of the predator-killing

agency.

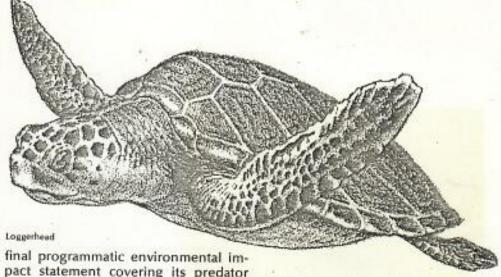
The agreement to examine ADC came out of meetings between Interior and attorneys for Defenders of Wildlife and nine other groups. Defenders, through Executive Vice-President John Grandy, has been represented since February on an Animal Damage Control Policy Study Advisory Committee. That group has prepared for the Secretary of the Interior an options paper on future predator control efforts.

Lawyers for Defenders argued that before the Secretary of Interior made any decisions on predator control, a full analysis of adverse environmental ef-

fects of ADC should be made.

The last major review of federal predator killing programs occurred in 1971, in the Report on Predator Control to the Council on Environmental Quality and the Department of the Interior—also known as the Cain Report. That report concluded that since the (then) new National Environmental Policy Act 'required all federal agencies to prepare environmental impact statements to justify existing or proposed programs' the time was ripe for 'a complete socioeconomic reassessment of the federal predator control program.'

The hint was not taken, and no justification for predator control programs has been made in the years since. Now, however, according to a letter from the Solicitor's Office at Interior, 'The Department intends to prepare a draft and



final programmatic environmental impact statement covering its predator management program in the West.' Or, as Grandy of Defenders says, 'The environmental impacts of a disastrous program will get a public airing.'

#### FWS Director Considers Condor Recovery Program

The Fish and Wildlife Service may soon approve a long-term, and expensive, recovery program for the California condor, a species perilously near extinction.

'All I can tell you right now is that the decision paper is before the director, with mine and the staff's recommendations, and I'd rather not say what those are,' said Keith Schreiner, an associate director of the Fish and Wildlife Service.

Schreiner said a decision will be difficult, partly because so much money and time would be devoted to a single species. He estimated that 'to totally restore the condor—captive breeding, acquisition, research, and so on' would require spending \$25 to 30 million over the next 30 to 40 years. 'And again, as usual, you're damned if you do and damned if you don't,' commented Schreiner.

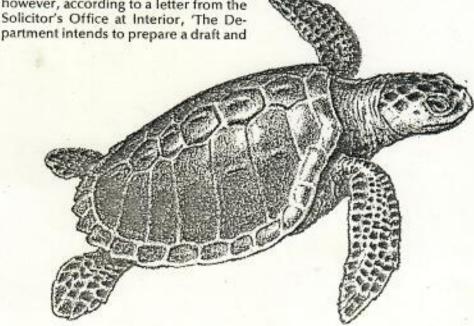
If the government goes ahead with condor propagation, chances are that efforts will be conducted at two or three different locations, partly as a hedge against disease or other calamity that could wipe out one captive population.

According to the recently published report of a California condor advisory panel (jointly appointed by the National Audubon Society and the American Ornithologists' Union) there are 'certainly not more than 40 and possibly fewer than 30' condors 'concentrated in a relatively small area close to Los Angeles that is subject to intensive development.' (See 'Government Flimflam Threatens the Condor' in the June 1976 DEFENDERS.) The advisory panel also believes there has been 'a steady decline in condor numbers, probably on the order of one to two birds per year, during the last decade."

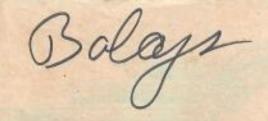
In addition to preserving large areas of suitable condor habitat and increasing research efforts, the panel recommends an extensive program of captive propagation as the 'only reasonable hope for achieving a large population of condors in the wild. . . . A large proportion of the present population should be trapped and bred in captivity. First-generation offspring of captive birds should be retained for breeding, and propagation should be continued long enough to produce at least 100 second-generation or third-generation offspring for release to the wild.'

Among perils condors face in the wild are pesticides and other toxic chemicals. Examinations of eggshell fragments and of three dead condors (one was killed accidentally in 1965, another was found dead in 1974, and a third was shot in 1976) revealed 'concentrations of DDE... among the highest ever re-

ported in terrestrial birds.



Pacific Ridley: illustrations by John C. Vrizzary



# CORECA

Edited by E. M. SWIFT

#### ACES

Holes in one are, by their very nature, out of the ordinary, but this summer there have been some aces that can only be described as downright bizarre. In Schererville, Ind., for instance, Roland Richards, who was mowing the course, parked his tractor near the 4th tee to chat with some friends who were playing. He borrowed a six-iron, teed up, and hit a 140yard shot into the hole, after which he thanked his friends, climbed on his tractor and went back to work.

That's one way to skip buying a round of drinks for everyone in the clubhouse, as tradition demands, but Gordon Barrett and Charles Klein came up with another. On the 172-yard 6th hole at the Columbus, Texas golf course, Barrett and Klein both hit good-looking shots into the blind green. When they came over the ridge, only one ball was visible. "There's one in the hole," their playing partner yelled. "What make are you playing?"

"Top Flite 1," they both replied.

Because there were no identifying marks on either ball, neither could claim the hole in one.

At the Quilchena Golf Club in Richmond, Vancouver, Ron Peterson and Barry Abraham approached the 155-yard 13th hole. It was Peterson's honor, and he took out a six-iron and knocked his ball into the hole. As reported in the Vancouver Province, "While he [Peterson] was still jumping up and down congratulating himself, Abraham selected the same iron and duplicated the feat." The odds on two players making consecutive holes in one are about 2 billion to 1. The third member of the threesome, facing odds of 90,071,134,505,408 to 'I for a third straight ace, choked and got a par-3.

But the strangest hole in one of the year occurred on the Manoir Richelieu Course in Murray Bay, Quebec. John Basaraba hit his tee shot six inches from the cup on the 165-yard 9th hole. As he and the other members of his foursome walked toward the green, a crow landed

beside his ball, picked it up in its beak and dropped it into the hole. A hole in one? "No," says Basaraba, "According to the rules, it can't count as one because an outside agency was involved."

Oh, pooh! That was no agency, That was a crow making an eagle of a birdie.

#### NIX ON ASTERISKS

This is likely to be a banner year for record-breaking performances in the NFL. The reason, simply, is that there are two extra games on the schedule in which to break season records.

The league has announced that existing records will not be protected by an asterisk, as was Babe Ruth's 60 home runs in a 154-game season after Roger Maris hit 61 in 162 games. Precedent was set in 1961, when the NFL schedule expanded from 12 to 14 games without a proviso to accompany new records with asterisks. The league had established the 12-game schedule in 1947, and before that the number of games in a given season varied from nine to 16. NFL officials felt it was simpler just to keep one set of records.

The mark that would appear most vulnerable is O. J. Simpson's season rushing total of 2,003 yards, set in 1973. That year he averaged more than 143 yards a game. For a player to rush 2,004 yards over the new 16-game schedule, he would have to average 125.3 yards per game. Only three backs have ever averaged that much in a season. Jimmy Brown did it twice (1958, 1963), averaging 133.1 in his best year; Simpson twice (1973, 1975); averaged 132.3.

Among the other records that have stood the test of time are three remaining from the old 12-game schedule. Dick (Night Train) Lane had 14 interceptions with the Rams in 1952; Jack Christiansen returned four punts for touchdowns with Detroit in 1951 (his record was tied by Rick Upchurch of Denver in 1976); and Don Hutson of Green Bay (1942) and Elroy (Crazylegs) Hirsch of Los Angeles (1951) had 17 touchdown receptions, a record tied in a 14-game season by Houston's Bill Groman in 1961.

But the mark that seems virtually indestructible, no matter how many games are added to the schedule, is the one set in 1960 for most points in one season. Paul Hornung of the Packers scored 15 touchdowns and kicked 41 extra points and 15 field goals for an astounding 176 points in 12 games. Last season three NFL teams didn't score that many points in 14 games-including Green Bay, coached by the quarterback of Hornung's 1960 squad, Bart Starr.

#### MISCREANT MANES

Fishermen curse their slimy lines, and swimmers gingerly tread the beaches. The reason is that the waters off New York and Connecticut have been aswarm with stinging jellyfish in unprecedented numbers. The main villain is the Lion's



Mane, a northern species that ordinarily abounds off Nova Scotia, where it floats bloblike with winds and currents, trailing poisonous tentacles that have been known to reach 50 feet in length. In The and Walter Payton once (1977), when he Adventure of the Lion's Mane, Sherlock Holmes remarked of the beast, "Cyanea capillata is the miscreant's full name, and [it] can be as dangerous to life, and far more painful, than the bite of the

> Last week Dr. Jefferson Turner of the New York Ocean Science Laboratory at Montauk, Long Island, reported going through masses of Lion's Manes in Block Island Sound, some with bodies-or "bells"-the size of a catcher's mitt. Dr.

> > continued



Turner had first noticed something fishy back in June, when small Lion's Manes began appearing in New York waters about two months ahead of schedule. An adult lives only one season, about six months, but as long as it lives it grows—like the Blob—feeding mostly on other species of jellyfish.

But there are few things feeding on the Lion's Mane. In the Orient, people eat jellyfish, but in the Atlantic the only predators are giant ocean sunfish (Mola mola) and sea turtles. Inasmuch as jellyfish are mostly water, and at best 3% protein, it is suspected that their protein may contain some unknown growth stimulus, since the leatherback turtle, which can reach 1,500 pounds and is the heaviest reptile on earth, gorges itself on jellyfish. The loggerhead turtle apparently gets a high on the jellyfish called the Portuguese man-of-war. After chomping them down, loggerheads have bloodshot eyes and are oblivious to the approach of boats.

Dr. Ronald J. Larson, a visiting scientist at the Smithsonian Institution, is one of the few jellyfish specialists in the world. Says Larson, "The jellyfish problem is here to stay. It's because of what we've done to the ocean. Natural food chains have been upset, and so jellyfish are replacing 'more desirable' creatures that we can eat. The first place we're going to see jellyfish is in estuaries and inshore waters that take the heaviest load of pollution. Jellyfish are what nature has come up with to continue the energy flow." How do we combat them? "Maybe we should raise turtles."

#### MT. VERNON

Finding him a nickname was a lot easier than finding him a football uniform. Freshman Vernon Broadnax is believed to be the largest player in college football. Only 18, he stands 6' 6" and weighs 410 pounds, drip dry.

To accommodate Mt. Vernon's 56" waist, the Murray State (Ky.) trainer had to cut up two pairs of shorts, then sew them back together as one so that Broadnax would have something to wear in practice. His shoulder pads, helmet, pants and size-16 shoes all had to be specially ordered—not once, but twice—because Mt. Vernon, who is Murray State's starting right offensive tackle, grew over the summer. When Murray State signed Broadnax to his football scholarship, he weighed 360 pounds and was immedi-

ately put on a diet. "I didn't stick to it," Mt. Vernon said, and over the summer he put on 50 more pounds.

His coach, Mike Gottfried, says, "The first day he came in here, I told our trainer, 'I want his weight down right away.' We assigned a student manager to go to his room every night to make sure he ate nothing. The only way we could weigh him was to send him over in a van to shipping and receiving. He weighed 410 on the truck scales before we started practice. Ten days later, after two-a-day practices in 90° heat, we sent him back to shipping and receiving and he still weighed exactly 410."

Broadnax came in third in the Ohio high school wrestling championships as a senior at Xenia High, and he can bench press 325 pounds. When his specially made pants finally arrived they were "much, much too big," according to Broadnax—something his teammates have mentioned about Mt. Vernon himself during pileups. "Our offensive linemen are always concerned where he's going to fall," says his coach.

Nonetheless, nothing but greatness is anticipated for Mt. Vernon's career at Murray State. Says Gottfried, "He'll surely be one of the first guys in Murray history to get his uniform retired because there's not going to be anybody to wear it after he's gone, I'll guarantee you."

#### **PSEUDONYM**

After a recent television interview, Yankee Coach Yogi Berra was given a check for \$100. The check read, "Pay to Bearer." Yogi took a look at it and said to the interviewer, "Come on. You've known me long enough to know how to spell my name."

#### SKIFLATION

When the Sun Valley Ski Company announced this summer that it intended to hike the price of lift tickets for the fourth time in the last six years, a group of local skiers decided to fight. They called themselves the Skiflation Committee and collected about 2,200 names on a petition, which they presented to the U.S. Forest Service. The Forest Service owns a portion of the land-Mount Baldywhere the ski runs are, and it must approve all price increases. To date it has operated on the principle that ski areas are competitive and has let the Sun Valley Ski Company regulate itself. Skiflation, however, maintains that this has

amounted to the sanctioning of price-fixing among Aspen, Vail and Sun Valley all of which will charge \$15 for a daily pass this season. Further, Skiflation has pointed out that while out-of-towners can choose which ski area to fly to, local residents are locked into Sun Valley, which they feel, for all practical purposes, has made the mountain a monopoly.

The Forest Service has responded by allowing some of the price hikes and blocking others. The end result is that the price of a daily lift ticket has been raised from \$13 to \$15 for a non-resident; from \$6.50 to \$8.50 for a resident paying a \$100 fee; and from \$525 to \$550. for a season pass. A half-day ticket remains at \$9-the price of a full-day ticket in 1973. All these prices are consistent with what is charged at most of the other major ski areas in the country, with the exception of the Salt Lake City area, where competition has kept daily lift tickets between Snowbird's \$12 and Alta's \$7.50, which is probably the best buy in the country. In the East, Stowe, as usual, is leading the way by charging \$16 a day for the coming season, but as yet no Skiflation committees have surfaced to protest.

Earl Holding, the owner of Sun Valley, bristles at the very mention of Skiflation. He refuses to disclose his company's finances but claims that during the most recent 16-month period, its net profit after taxes was less than 1%, and it was all used for the \$3 million worth of improvements on Mount Baldy. "The \$8.50 we charge our local skiers is way below our cost," Holding says, "but they're the ones causing all the trouble. They say we're turning skiing into a rich man's sport. That's ludicrous. The price of a lift ticket is a bargain any way you look at it. If skiing is a rich man's sport, what is Disney World?"

For the record, Disney World is \$10 for twelve adventures.

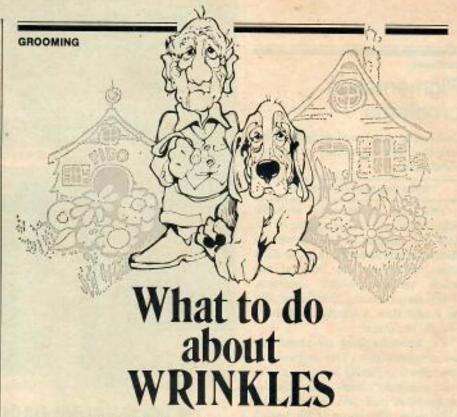
#### THEY SAID IT

- Bobby Murcer, Chicago Cubs rightfielder, after facing Phil Niekro, the Atlanta Braves' knuckleballer: "Trying to hit him is like trying to eat Jell-O with chopsticks."
- Don Zimmer, Boston Red Sox manager, on his pitching this year, compared to last: "We don't have anybody like Rick Wise and Fergie Jenkins, who cried all the time, got the hell beat out of them and blamed me."



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Distik-The lip shield



Growing old would be much easier to accept cheerfully if only our looks didn't reflect the calendar's progress. Wrinkles are perhaps the most unwelcome signs of aging, and unfortunately there's no way to prevent them. However, cosmetics can effectively camouflage wrinkles, and there are medical and surgical treatments that can even eliminate them, at least temporarily.

#### What causes wrinkles?

Your facial expressions, combined with time, gravity, and heredity, cause sagging skin. There are more than four dozen muscles in the face. If you frequently smile, frown, squint, grimace, scowl, or pucker, these muscles etch "expression lines" on the face. Also contributing to your wrinkles is the natural aging process. The skin gradually loses its underlying fat and its ability to retain moisture.

However, it's not just the passage of time or inherited factors that determine skin wrinkling. Sunlight—more than any other single factor—seems to cause premature aging of the skin. Wind and other environmental factors also cause wrinkles. One study compared the facial skin of older persons with skin from parts of their bodies that were usually covered. The exposed skin showed degenerative changes, while the un-

exposed skin looked surprisingly healthy and young. The damaging effects of sun and wind are dramatically evident in the faces of elderly farmers and sailors.

Dark-skinned persons have natural protection from the damaging effects of sunlight in the form of high amounts of brownish pigment called *melanin*. That's why elderly dark-skinned people often look much younger than lighter-skinned persons of the same age.

While a major weight loss seems to accentuate facial wrinkles, sagging post-diet skin will improve in time. The younger you are when you shed extra pounds, the better because skin tends to become less elastic with age.

#### Good and bad home remedies

Wrinkles are much more obvious when the skin is dry. Dry skin indicates a lack of water, not oil. The best way to keep skin looking smooth is to use emollients (moisturizers and lubricating creams) regularly. Emollients are combinations of water and oil that "cement down" surface scales. Useful as emollients are, there is no evidence that they attract moisture to the skin. Their use is limited to giving skin a smoother feel and providing a barrier to slow continued

Drawing: Hellman Design Associates

continued

#### Pigmentation problems

that can be purchased without a prescription at a pharmacy or department store.

#### What causes birthmarks?

The term "birthmarks" includes skin irregularities that appear in the first few months of life as well as those present at birth. Light or dark spots caused by too little or too much melanin aren't common. When they do occur, they're usually no larger than a quarter and don't require treatment.

Far more frequent are blood vessel abnormalities. The salmon-colored patch typically appears on the back of a baby's neck, upper eyelid, or forehead and gets red when the baby cries. This type of birthmark fades shortly after birth. The portwine stain, named for its bluish red color, is present at birth and has an irregular outline, is flat, and will not fade or disappear. Unfortunately, attempts to destroy or treat port-wine stains are usually not very successful, often producing a lumpy surface more unattractive than the original mark. If the appearance is unacceptable, the best way to deal with such a mark is to conceal it with makeup. Strawberry hemangiomas usually begin in the first few months of life. An area of the skin becomes bright red with an elevated surface. Strawberry hemangiomas usually disappear by themselves, frequently by the time a child is school age.

Cavernous hemangiomas are also present at birth. These birthmarks have a plum color and a doughy consistency. They often disappear by themselves, but their disappearance is not so predictable as with strawberry hemangiomas. If a single blood vessel supplies the cavernous hemangioma with most of its blood, surgery on the vessel is often successful in making the hemangioma less noticeable.

For most birthmarks, doctors generally adopt a "watch and wait" approach, rather than subject a very young child to drastic treatment. 

(Produced in cooperation with Lynne Lamberg.)

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## IF YOUR EATING HABITS AREN'T ALWAYS RIGHT, HERE'S A HABIT YOU SHOULD BE GETTING INTO.



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continued

# What to do about wrinkles

down the evaporation of water from the skin. The use of emollients, however, can make acne worse.

Wrinkles tend to be more noticeable around the eyes and on the throat because there is little underlying fat in these areas. But special eye and throat creams are simply variations of the basic emollient formula. Similarly, the addition of an exotic ingredient—from turtles, minks, vitamins, cucumbers, lemons, and the like—usually up the price of the product without demonstrably increasing its effectiveness. Most dermatologists think emollients that contain estrogen are no better than ones without the hormone.

The purpose of facial saunas is to temporarily restore moisture to the face. One thing you should never do in an attempt to restore moisture to the facial skin is to use steam that is generated by boiling water on the stove. Every year numbers of people are injured in this foolhardy attempt to duplicate a facial sauna. You can get the beneficial effects of a sauna by applying a warm towel directly to your face and following up immediately with an emollient.

Facial exercises don't prevent sagging or flabbiness, according to an American Medical Association (AMA) study of skin health and cosmetics. Improving the tone of underlying muscles has no apparent effect on the outer skin layers where wrinkles occur. Vigorous facial massage may temporarily increase blood flow to the skin and even produce some swelling by increasing the amount of fluid in the tissue, but any benefits are temporary. Incidentally, there's no evidence that special methods of applying makeup either cause or prevent wrinkling; any gentle motion is appropriate.

Facial masques, usually made of clays, gums, or synthetic rubber polymers, produce a tightening sensation as they dry and have a cleansing effect since surface skin debris comes off along with the masque, But some people, especially those who have dry skin, may find the masque irritating.

The wrinkle-fighting arsenal also



includes headbands designed to pull up and tighten the skin on the lower part of the face. Their efficacy largely depends on the skill of the wearer.

#### Medical help for wrinkles

It's unrealistic to expect quick, painless procedures to result in remarkable improvement. If you're really bothered by your wrinkles, ask your family doctor to refer you to a dermatologist or plastic surgeon. Medical and surgical techniques are available to improve the appearance of the skin, but they require great skill and experience to avoid unsightly scarring.

Individual differences in skin healing may cause variations in color and evenness regardless of the surgeon's ability. Here are the facts about the techniques most commonly used to minimize wrinkles.

 Dermabrasion or skin planing removes the upper layers of the skin (usually around the mouth) with a rapidly rotating electric brush. The continued

# Dollar's Worth from Mary Willis





Don't put Skin Quencher' away when you put your winter sweaters away! Your skin needs summer care too. That's why Skin Quencher Hand and Body Lotion is packed with special emollients to help your skin feel smooth and comfortable all year long. Plus it's quickly absorbed and fragrance-free. This summer, be a soft touch with

Skin Quencher by Chap Stick," and proclaim the news with your own "Soft Touch" bath/beach towel. Look for details on Skin Quencher displays.

This season there are even more reasons to use Lip Quencher\* than its 24 mouthwatering shades and soothing moisturizers and emollients: "Fashion Fantastic Sweepstakes!" Sponsored by Lip Quencher and by No nonsense\* Pantyhose, the Sweepstakes offers over \$100,000 in prizes. Details are on displays of No nonsense Pantyhose and Lip Quencher Moisturizing Lipstick. And there's an extra bonus: valu-



able coupons packed in specially marked No nonsense packages save you money on Lip Quencher. Try Lip Quencher by Chap Stick\*—and at the same time, be sure to enter the "Fashion Fantastic Sweepstakes!"



The Sergeant's name on rawhide products guarantees they are 100% natural beefhide and not all manufacturers can make this claim. As Sergeant's Rawhides help satisfy a dog's natural chewing needs, they help clean teeth and massage gums at the same time. When you buy Sergeant's, your dog

gets that genuine all-beef flavor he loves —and you get 100% assurance of a quality, natural product. So whether your dog prefers rawhide chew toys, sticks or bones, he gets only 100% natural beefhide from Sergeant's, the people who have been taking good care of pets for over 100 years.

Good grooming brings out the best appearance in any dog, and Sergeant's Shampoos are the finest grooming values you can find. Choose from three quality formulas to make your pet more attractive and more comfortable—just in time for the warmer weather. Skip Flea' Shampoo kills fleas and declaring the state of the sta



and deodorizes your pet; Creme Shampoo adds lustre; and Anti-Tangle Shampoo prevents matting and tangling in long-haired dogs. No wonder pet owners have looked to Sergeant's products for over 100 years!

Even the best cared-for dogs and cats can have worms. Pet-lovers know this problem can incapacitate and even kill an animal if left



untreated. So they turn to Sergeant's" proven quality products, specially formulated to treat the most common types of worms. Roundworms disappear with Worm-Away" Capsules; hookworms are killed with Sure-Shot" and Puppy Capsules; and tapeworm vanish with Tapeworm Medicine. All these remedies come from Sergeant's, the pet care people. continued

#### What to do about wrinkles

procedure is often performed under local anesthesia and may not require hospitalization. Following the procedure, crusts or scabs develop at the site of the dermabrasion. When they fall off in about two weeks, the skin is smoother and somewhat lighter. The color difference between new and old skin can be concealed with makeup and usually evens out after a few months.

While dermabrasion is most helpful in reducing fine facial wrinkles, more extensive plastic surgery (usually performed in a hospital) is necessary to reduce deep wrinkles.

 Chemosurgery or skin peeling destroys the outer skin layers with caustic chemical agents. The procedure is considered particularly effective in removing wrinkles around the mouth, eyes, forehead, and cheeks. A total "face peel" as performed by a qualified dermatologist requires hospitalization and is often painful.

Be wary of procedures described as "face peels" that are offered by many beauty shops. The American Medical Association has condemned the use of superficial chemosurgery by nonmedical personnel because some chemicals may cause burns and permanent scarring if they are not used properly.

Face-lifts can correct baggy eyelids and other sagging facial skin, and loose neck folds by stretching and repositioning the skin. Partial face-lifts, such as one around the eyes, are often done on an outpatient basis. More extensive surgery may require a stay of a few days in the hospital and is therefore more expensive. If successful, a total face-lift can make a man or woman look five to ten years younger.

#### How to prevent further wrinkling

The wrinkling effects of the sun are related to cumulative sun exposure. (See "Playing it safe in the sun," Better Homes and Gardens, July, 1977).

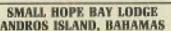
You should resolve right now to avoid excessive exposure to the sun and to use sun-blocking preparations every time you go outdoors for an extended period of time—to play tennis or water-ski, for instance, Cosmetics manufacturers have made it easier for you to block out the sun's damaging rays by designing everyday cosmetics with built-in sunscreens.

Proper cleansing technique is also important if you're going to avoid wrinkles. Use lukewarm water and a mild soap and gently massage the face. Pat dry and follow each cleansing with an emollient.

(Produced in cooperation with Lynne Lamberg.)

For more information about the effects of the sun on your skin, write to the American Medical Association for their booklet called "The Sun and Your Skin" (OP319). Be sure to enclose 40 cents. The address is: Order Department, American Medical Association, 535 North Dearborn Street, Chicago, Illinois 60611. Better CIRCULATION 8,000,000 June 1978 • 95¢ ones and Gardens. Stitch a roomful of projects from our alphabet Campler Tax facts for when you sell your house Recipes from America's best cookouts 12 color pages of backyard projects Emergency medical care for your kids when you're not there A Report From More Than 300,000 Readers







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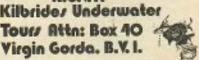
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#### NEW ZEALAND NESSIE?

The decomposed carcass brought up by a Japanese fishing trawler last April off New Zealand might have been a plesiosaurus. This animal is thought by scientists to have become extinct 65 million years ago. Others, however, believe the famous Loch Ness Monster is none other than a plesiosaurus.



Photographs courtesy Talyo Fishery Co.

The New Zealand carcass was brought up in a fishing net which had been lowered to the seabed 300 meters below. It was brought onboard the boat with a crane after fishermen passed a cable around its central part. The smell of the 32 foot, two-ton animal was terrible and fluid dripped from it onto the deck. The captain, fearing contamination of his catch, ordered the body dumped back into the ocean. Before that happened, however, Michihiko Yano, an official of the Taiyo Fishery Co., took photographs of the animal and its measurements as well.

The plesiosaurus, a marine reptile, was like a snake with a turtle's body

#### BAJA U/W PHOTO WORKSHOP

Baja Expeditions, Inc., is offering a unique underwater photo workshop in the Gulf of California, January 15-22, 1978. Informal lectures on both still and motion photography will be given by veteran underwater photographers Marty Snyderman and Howard Hall of the San Diego Diving Locker. Hall was a member of the film crew of THE DEEP and has published work in National Geographic, Smithsonian and SKIN DIVER Magazine.

Travel will be aboard a 75 foot fishing boat, Poseidon, fully equipped with a scuba air compressor. The number of divers is limited to 18. Basic scuba certification is the minimum requirement. Full cost of \$585 includes: Air flight to La Paz, all boat accommodations, meals and beer, fishing license, bus from San Felipe to San Diego. Tanks, back packs and weight belts are provided. For in-formation write: Baja Expeditions, Inc., Box 3725, San Diego, CA 92103.

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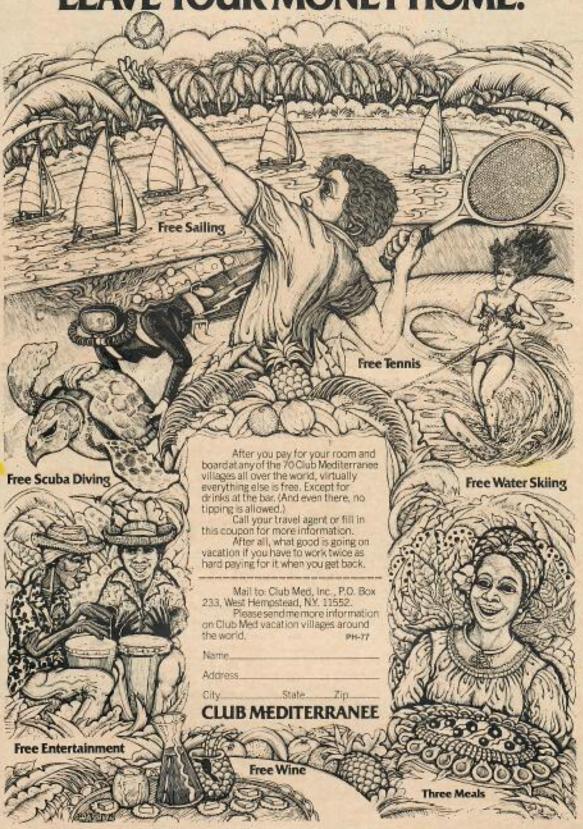
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# POLLY BERGEN: A WOMAN WHO DOES THINGS HER OWN WAY

You enter Polly Bergen's apartment in New York's East Seventies directly from the elevator. The living room is darkening with the dusk. It is a comfortable room, dominated by a low, intricately carved wooden Persian table with a marble inset at the center of the top. At the window, a framed photograph of Kirk Douglas—beaming, of course—catches your attention. "This is the result," runs the inscription on the picture, "of three months of Oil of the Turtle."

The result of a much longer association with Oil of the Turtle enters the room. In the soft light, wearing a lilac crepe blouse and black velvet pants, Polly Bergen looks lovely. Her hectic schedule of the last few months, during which she was cohost of Not for Women Only, has finally eased up.

"One of the prime reasons that I left the show was that I was literally, totally confined. The producers had promised that I would have time to work on my own projects. I had already sold a project to CBS which I just could not follow through on for lack of time," She relates how, during one typical week, she prepared and taped fifteen segments of the half-hour television talk show, spent one of her remaining free days at her monthly meeting of the Singer Company board of directors, of which she's a member, and the other as guest of honor at an Anti-Defamation League luncheon.

"I loved doing the show—but it wasn't creatively rewarding enough. The main problem was that they were really into educational, consumer shows. I'm instinctively a show biz lady. I felt we could reach a broader audience than we did. But the show never got the kind of promotion it deserved, so finally I decided, if NBC didn't feel it was important, why should I?"

What about the garish red headline across the front page of the New York Post announcing that Polly Bergen would be fired?

She takes the question calmly. "I gather from my inside sources that that headline was Rupert Murdoch's first story decision after he had taken over the Post. Of course I wasn't fired; they don't have a replacement for me, and as a result, the show may go off the air."

She strikes a match on the underside of the Persian table and lights up a cigarette. "I don't think I'll ever go back to TV as a performer. My head is not into being in front of the camera."

Before all this, before Oil of the Turtle, Polly Bergen was an actress and a singer. "I was discovered twenty years ago. The only thing that matters to me now is doing what I enjoy doing. Things that are fulfilling to me. You see, I...left... show business. It did not leave me. I was still in demand—as a singer and as an actress. But I'd done it. Some of it well, some of it badly, but I'd done it."

You try to think of other actresses who have entered the business world with as much success as Bergen, and the name Joan Crawford comes up. Was she an inspiration?

"Nobody was an inspiration," Polly says emphatically. It turns out that Polly was the girl in the Pepsi ads near the beginning of Ms. Crawford's reign. "She is not one of my favorite people," she adds, and the subject is closed.

Polly Bergen, who started Oil of the Turtle as a mail-order business (she did everything from package design to promotion) sold the enterprise to Fabergé some years ago. But her involvement with the skin-care product was total for the first three years. "I've never fronted for anything. I have a strong personal feeling about everything I do."

This feeling extends to her work on the Singer board, which she finds difficult because, as she puts it, "I really want to run their whole marketing division. I'm' the first woman on that board in one hundered and twenty-five years. It's unbelievable to me that all these men sat around and made decisions on a product that was used mostly by women."

Polly Bergen is now about to enter yet another career—as a producer. She is assembling a production company and working on three films, one of them for television. She is particularly excited about this last project, which is a strong—as opposed to weepy—woman's story based on fact. The idea is to have

women starring, writing, and directing it as well. "But," she adds, "I wouldn't forsake quality, or compromise what I think is the best."

Another one of the films will be an inside look at Hollywood and the children of Hollywood people. The subject of the third film is hush-hush at this point. She is working with her former husband, producer Freddie Fields, on one of the projects. It was during her marriage to him that she gained production experience. "I found properties, read scripts . . . I really worked for him all the years that we were together."

But no reunion is in sight. "My feeling about marriage for a woman my age is 'Why?' Now, I don't approve of having a family and not being married. But besides that, I just don't know what marriage means anymore. I was raised to believe that the goal of every woman was to get married. Recently, I was asked to be the cover girl of the magazine Woman's Home Companion, which is supposed to be revived. Well, I said to Sally Blackstone, the editor, that frankly I thought she could have made a better choice for their first issue. But she said that I was an example to a lot of womenat all age levels-of a woman who had really arrived. Divorce notwithstanding."

So Polly Bergen is actually no less busy these days. You wonder how she can possibly manage her schedule. "I couldn't function if I wasn't busy," she replies. "Right now, I'm dividing my time between California and New York. But I enjoy it. There are some things. . . . I'd like to have lunch with the girls, sleep till nine or ten o'clock. It would be nice if I could have some of that." She shrugs and smiles. She has to leave soon for the board meeting of the Martha Graham Dance Company.

At the elevator, she says good-bye. The door opens, and a blaze of light from the car lights up her face. She looks no less terrific. • —by Jon Arlow

With both turtle and talk show behind her, Polly Bergen is about to embark on yet another career—as a producer.

> LIBRARY OF GEORGE H. BALAZS

Hunter's estimate is not exaggeratedeven though no American League player has hit as many as forty home runs in a season since 1970. Jackson himself slammed forty-seven in 1969, when the league expanded from ten to twelve teams, and he could take advantage of the pitching decline again now that the league has added franchises in Seattle and Toronto.

Yankee Stadium's short right field fence figures to help Jackson immensely, even though the distance from home to the right field foul pole was increased from 296 to 310 feet when the park was rebuilt two years ago. Still, it's worth remembering that the only major leaguers ever to reach the sixty-homer level were lefthanded Yankee batsmen-Babe Ruth in 1927 and Roger Maris in the expansion year of 1961.

Rival pitchers have a healthy respect for Jackson's prowess at the plate. Baltimore's Jim Palmer, whose second straight Cy Young Award came in the 1976 season and was achieved partly because he and Jackson were teammates, concedes, "I'm very careful against him. I still remember two homers he hit off me in a play-off game in 1971. When I pitch against him, I'm just happy to keep the ball in the ball park."

Strikeout king Nolan Ryan of California complains, "He hits the ball up the alley for a lot of doubles. That's besides all the homers he gets."

New Jackson teammate Dock Ellis remembers Jackson well. As a Pirate pitcher in 1971, Ellis surrendered Jackson's mightiest home run-a tworun, pinch-hit shot in the All-Star Game at Detroit. Even the hitters still talk about that one.

"It was the hardest hit ball I've ever seen-here or anywhere else," said longtime Tiger star Al Kaline, now an announcer for the club.

The 6-foot, 200-pound Jackson has a well-deserved reputation for explosive displays. He collected ten runs batted in during a 1969 game against Boston; nicked the Minnesota scoreboard beer bottle with a 517-foot homer; and personally overcame his team's 3-2

deficit in the 1973 World Series against the Mets with a homer, single, and two doubles in the last two games.

When the A's encountered a latesummer slump in 1974, Jackson assumed the mantle of leadership, telling his teammates, "Stay cool, relax, we'll be all right." That day, he homered, singled, and doubled as Oakland swamped Detroit, 13-3, with a nine-run eighth inning.

The strong-armed outfielder has a logical explanation for his success. "I try harder in other departments when my hitting goes sour," he explains.

Last spring, stunned by his sudden trade from Oakland to Baltimore, his hitting suffered. Though he led the Orioles with twenty-seven home runs and finished second on the team with ninetyone runs batted in, Jackson started slowly. His first Baltimore home run, a grand-slam that helped defeat the Brewers, didn't come until May 12. But he excelled on the field and on the basepaths, producing a career record of twenty-eight stolen bases.

The last time Jackson had problems at the plate was in 1970, the year after his 47 homers and 118 RBIs had made him one of the most feared sluggers in the game. The outfielder staged a five-week holdout during stalled spring salary negotiations and was not well-tuned ..... when the season started for keeps in April.

It wasn't long into the season before Jackson's one-man energy crisis was painfully obvious-in Oakland and around the league. The A's platooned him, and, at one point, threatened to demote him to the minors. At season's end, his average had dwindled to .237, his home run count to 23, and his RBI total to 66. His confidence was gone, and so was Jackson-off to seek a comeback in the Puerto Rican Winter

Current Cleveland manager Frank Robinson, then a star player for the Orioles, helped Jackson recuperate. "When I got down there," Jackson admitted, "I was rock bottom in morale and confidence. I told Frank, 'I don't think I'll ever be able to hit a ball again." He said, 'Okay, you've got no place to go but up.' From then on, we talked continuously about baseball, and I did most of the listening.

"The whole experience bordered on being an intellectual awakening, a period of enlightenment. I'm a different person now because of Frank Robinson, Frank taught me to be a professional-no pressing, no worrying, no tantrums."

Under his influence, Jackson set a Puerto Rican league record with twenty home runs, then slammed ten more in Oakland's twenty-two spring exhibitions and belted thirty-two during the season to lead the club to its first divisional championship in 1971.

Dick Williams, who took command of the A's that spring, handled Jackson well-putting the finishing touches on the athletic masterpiece molded by Robinson.

"We had some serious conversations," Jackson said of Williams, "but Robinson laid the groundwork." Williams, asked what he told his moody slugger, had a simple reply: "On the days he doesn't get his hits, I told him to do it with his arms or legs or something else."

Jackson, whose 19th homer this summer will be the 300th of his career, has followed the advice well, "I can do it all," says the now confident Jackson. "There are others who hit more consistently or harder, who run faster, field better, or throw better. But no one does as many things as well as I do."

Jackson, who used to work for twentyfive to thirty cents a day in his father's tailor shop in Philadelphia, is now anything but hard-pressed for money. Having recently signed on as a sports commentator for ABC-TV, and with the Yankee contract under his belt, Jackson is financially secure for the present. And his future looks just as bright. With offers for off-the-field endorsements rolling in, (Jackson is already under contract with Puma shoes), Jackson can afford to sit back and relax.

But relaxing is the last thing on his mind. For now, Reggie Jackson is intent on only one thing: being the brightest star in the world's biggest showcase-New York. - by Dan Schlossberg

FOSSIL OF RARE

## SEATURTLE FOUND

BAKERSFIELD (AP) - an important feature for a tle which inhabited South—said. ern California 150 million—When alive it probably years ago has been discovered near here by a Smithsonian Institute archaeologist.

earthed the remains of a species of turtle known as "Psuphorous" in a park 10 miles east of Bakersfield along the Kern River.

kind ever found in this country. The first was dug . up on the Palos Verdes peninsula in Los Angeles of other fossil findings in County, said Emlong, who Kern County, Emlong directs the Smithsonian's located the shell two West Coast operations.

vertebrae were evident -

The fossil of a rare sea tur- fossil discovery, Emlong

stretched about seven to eight feet with its head extended, he indicated. It had a soft base and used fins to Douglas Emlong un propel itself through water.

The fossil has been encased in plaster and will. be driven to the Washington, D.C., museum It is only the second of its in a special truck. Emlong had no estimate of its potential dollar value.

After researching records months ago in a roadbed. The ancient turtle However weather conmeasured about six feet ditions prevented him from long and its ribs and digging for it until two weeks ago.

July 1576 Largest Turtle

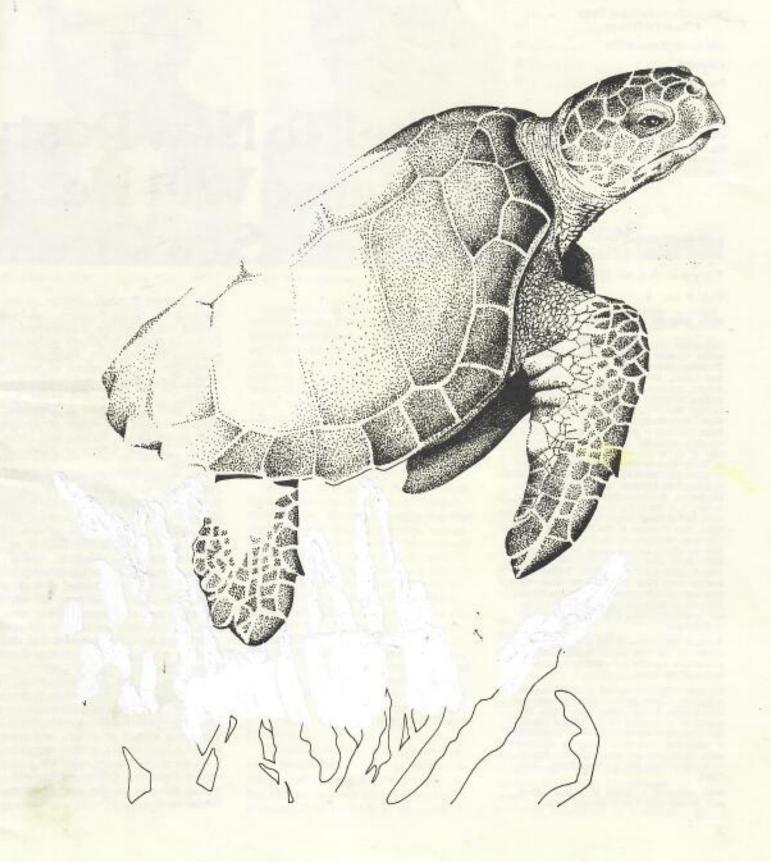
WASHINGTON (AP) ured 11 feet from nose - The world's largest to tail and weighed turtle, fossils of which three tons. were discovered in Wood's two speci-Venezuels in 1972, had mens measure 7 feet 2 shells of over seven inches and 7 feet 6

Paleontoligists Roger pletely intact C. Wood named his dis
It is now on display covery Stupendemys at the Museum of Com-

feet when they roamed inches. The larger shell the earth — about five was found in fragments, while the small-agon er one was almost com-

geographicus and said parative Zoology at they may have meas- Harvard University.





### The Uncertain Future Of The Loggerhead

### Scientists Study Turtles' Habits

#### Donna Florio

South Carolina Sea Grant Program

The loggerhead turtle's shrinking population in recent years led to its inclusion, in 1970, on the International List of Endangered Species, and it may soon be named a "Threatened Species" under the U.S. Endangered Species Act.

Concern over the decline of the loggerhead has prompted two South Carolina scientists to explore the nesting habits of the loggerhead, and to attempt to determine the rate of incidental capture by shrimp trawlers. Project results will aid in development of management plans to protect the turtles.

The nesting study was initiated in 1972 by O. Rhett Talbert of the Belle W. Baruch Institute of Marine Biology and Coastal Research at the University of South Carolina at Columbia. Under the direction of Dr. John Mark Dean, Talbert began a preliminary nesting activity and predation study on Kiawah Beach, a barrier island some 20 miles southeast of Charleston.

The study was supported in its first year by the National Science Foundation and through 1975 by the Kiawah Beach Company. During the study of Kiawah Beach, several questions arose—Which South Carolina beaches are the sites of major activity by the loggerhead? Which are prime nesting sites? Where do the immature turtles spend their adolescence? To answer these questions, Dean and Talbert proposed a three-to-five-year study utilizing aerial surveys and tagging techniques, and, in 1976, won support for their endeavors from the South Carolina Sea Grant Program.

#### **NESTING HABITS**

In their earlier studies, the two scientists had defined the nesting cycle of the loggerhead: The female turtle emerges from the surf at night on an oceanfront beach and crawls laboriously to the frontal dunes. If conditions are suitable—no lights or activity—she digs a pit that may be as large as several feet deep.

She then settles partially into it and deposits about 125 soft-shelled eggs. After all the eggs are laid, the female covers the nest carefully to disguise it, then plods back to the sea.

The eggs usually hatch in approximately 60 days, but chances are great that they will be destroyed by predators. Raccoons are the major problem, accounting for the destruction of about 97 percent of the unprotected eggs on Kiawah Beach.

If the eggs survive, the hatchlings immediately head for the surf. As they cross the open beach to the sea, they face the threat of becoming prey for sea gulls and other creatures. Those that do reach the surf vanish from human sight for about a year. They are encountered again by man only when the adult females are seen crossing beaches to nest. Males and juveniles are seen only when accidentally captured by shrimpers or when their carcasses wash up on beaches.

#### FLYING THE COAST

Dean and Talbert felt that an aerial survey of the beaches would yield the most reliable information on the distribution of nesting activity along the South Carolina coastline. In an aerial survey, the researchers could view tracks left by female loggerheads and estimate how many nests resulted.

Aerial surveys were conducted at least once a week during the 1976



Hatchling Loggerhead turtles like this one have been seen in decreasing numbers on the South Carolina coast in recent years. Sea Grant scientists are studying nesting habits and other behavior of this threatened species.

nesting season (late May to mid-August), and from these, the researchers identified two distinct types of tracks in the sand. The most important track pattern terminates with a pit, indicating that a nest has been dug and eggs laid. The second pattern, termed a "dry run," occurs when the female emerges from the sea and makes her way into the dunes, but for some reason, does not nest before returning to the water.

To supplement these surveys, this summer Dean and Talbert will begin onboard tagging of turtles accidently netted by shrimpers. Volunteer shrimpers will be provided with tagging materials and data cards on which they will provide information about the date and location of the catch, size and sex of the animal netted. Talbert is "extremely excited" about the enthusiasm and cooperation of the shrimpers who have volunteered.

The information collected by the shrimpers will be correlated with the results of the aerial survey to fill in gaps in the researchers' knowledge of turtle populations, feeding grounds and nesting patterns. The offshore tagging program is especially important to the overall loggerhead popula-

tion study since beach tagging assess only female adults. Males and adolescent females never come ashore, so a true picture of loggerhead behavior and numbers is not available through an exclusively on-shore tagging program.

Tagging also will help to identify inter-island nesting tendencies. Females usually nest three to six times in an average season, and scientists want to know if the turtles migrate from island to island to nest, or if they use the same island repeatedly. The animals are known to have the apparent ability to select a new beach over one which formerly was suitable but now is disturbed, but it is not known why or how often this choice is made.

#### SURVEY RESULTS

Early results of the Sea Grant project show the highest concentration of nesting activity is in the Cape Romain National Wildlife Refuge, particularly on Cape Island. These beaches are undeveloped and will remain so. Kiawah, although the site of extensive development, has strict restrictions against lights and night traffic on its beaches.

Other beaches, such as Folly and Sullivan's Island, have experienced almost no nesting activity in recent decades, and Dean and Talbert are concerned that this could be indicative of a decline in the total population, as well as a change in migration patterns. The southeastern coast of the United States currently is one of the areas of greatest loggerhead activity in the world, but without a mangement program, the researchers fear a further decrease in the population and possible extinction.

The future of the Atlantic loggerhead at this point is questionable, they say. Whether or not it will go the way of the hawksbill, leatherback and Atlantic Ridley turtles and become a threatened species in the U.S. is a question that will soon be answered, since the loggerhead is under consideration for addition to the U.S. endangered species list.

No one, however, can answer the question of whether the turtles, despite all of man's good efforts, will become extinct, but Dean and Talbert, with the support of Sea Grant, hope to provide the information necessary to draw up management plans to prevent their demise.



Vol. 5, No. 1 P.O. Drawer E - Sanibel, FL 33957 (813) 472-1041

January 22, 1977

### MEMBERSHIP RENEWAL TIME

With the new year it is once again the period for membership renewal in the CARETTA RESEARCH Project. Our fiscal year is based on the calendar year and for budgetary and planning purposes it is essential that renewals reach us early in the year.

A membership application envelope is enclosed with this NEWSLETTER for renewal purposes. That we may credit our various accounts we ask that you complete the address section and designate where your membership should be used. If you have two addresses - summer and winter - please indicate both and the approximate dates you are at each. To save rising costs in postage we anticipate to change over to non-profit organization rates soon. Unless the address used for this bulk rate is correct at the time of mailing it is questionable if our material will reach you.

If you have already forwarded your 1977 membership contribution please pass the envelope on to a friend or relative.

### 1977 UNIT LEADERS

Eight Units are planned for 1977 with approximately four special projects proposed in addition to the long-established Unit programs. Unit and Leaders are as follows: Casey Key - Kitty Turner; Manasota Key - Lucy Pond; Captiva - Pat Hagan; Sanibel - Paul Zajicek; Lover's Key - Tucker Patton; Bonita Beach - Jim Vanas; Vanderbilt Beach - Richard Beatty; Naples Beaches - Rick Bantz. The Special Projects (other than specific specialized studies) are proposed for North Captiva, Keewaydin Island, and Cape Romano.

We will continue many of our regular investigations into the life history of the loggerehead turtle this summer. The important tagging/recapture efforts are to remain a priority function as will collection of data incidental to that aspect of our program. A major conservation responsibility of CARETTA RESEARCH has been safeguarding loggerhead eggs in areas where they are jeopardized because of various negative factors - predation, erosion, etc. Where data indicates and produces justification we intend to resume the transplantation of threatened egg clutches. This operation will be contingent on funding levels available for Special Projects and established Units and the availability of personnel.

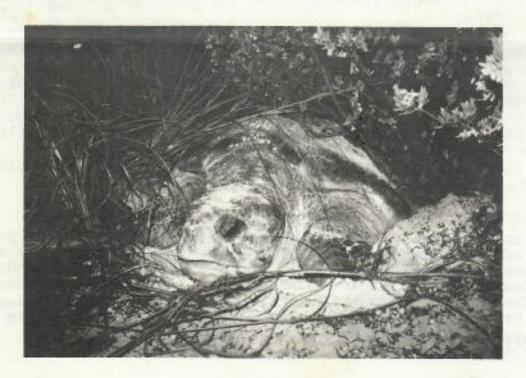
As has been policy we will utilize, wherever possible, senior high school and college students and school teachers to help conduct the actual field work. Anyone interested in this activity should contact the Project prior to 1 April. Positions will be available in June and July.

Some interesting studies that have been ongoing which shall continue include - embryological development and egg structure data analysis, aerial surveys of nesting beaches, influences of building and vehicle lighting upon nesting females and hatchlings, assessment of the impact of predation upon natural, unrelocated, nests, and limited captive rearing or "headstarting" of young loggerheads.

### LIMITED EDITION COLOR PHOTOGRAPH NOW AVAILABLE

Our Captiva Unit Leader, Pat Hagan, who is an employee of the U.S. Fish and Wildlife Service recently won the 1976 National Photo Contest of the Fish and Wildlife Service (color, endangered species). The winning photo was a loggerhead turtle returning to the water after nesting. Pat has taken many fine photographs of loggerheads and with his cooperation we have selected one of his top photos and are offering it as a limited edition of 100 prints -- as a fund-raising means for our organization.

The 11 X 14 inch, professionally printed color photograph which depicts a nesting loggerhead turtle is reproduced below in black and white. Orders for signed and numbered prints are now being accepted. These prints are being offerred to our membership at \$25.00 each and to new members at \$35.00 (including an Associate Membership). To order by mail please include \$2.00 to help defray postage costs.



### TURTLE TAGGING - FOUR STEPS



The front flippers of the turtle are carefully examined to prevent double tagging. Usually the animal is permitted to finish nesting before the tag is applied.



Trying to handle the turtle, which may weigh over 300 pounds, is difficult - a "sandstorm" is an every night occurence.



If the specimen is not wearing a tag she is carefully turned upside down to prevent escape and allow weighing after tagging.



The tag, made of monel-metal, is permanently afixed to the turtle's front left flipper. The individuals shell length and width, head width, weight, and location on the beach are recorded along with the tag number. Our tags have been sent back from such far-away places as the Yucatan, Bahamas, Mississippi and Maryland. Tagging is an essential tool in determining the loggerheads role in the marine ecosystem.

### ANNUAL MEETING

Our ninth annual meeting will be held on Sanibel, at the Community House, on Saturday evening at 8 pm, 19 February.

The speaker will be Dr. Peter Pritchard a leading marine turtle specialist and a Vice President of the Florida Audubon Society. Dr. Pritchard has intensely investigated, under the auspices of the World Wildlife Fund, the sea turtle populations of northern South America, the Galapagos Islands, and the Kemp's ridley from the Gulf of Mexico. He has authored dozens of scientific papers on marine turtles and the book "Living Turtles of the World".

As is customary the meeting is open to the public so bring along a friend for a very interesting and educational program. Don't forget to mark your calendar!

### NEW LEAFLET

In our last NEWSLETTER we solicited funds to produce a new full-color brochure. Response was not what was anticipated so in the latter part of December we contacted several of our larger contributors seeking funds that would permit us to go forward with plans for the much-needed piece of literature. We are pleased to announce that response to our letter was quick and generous -- as of the date of this NEWSLETTER \$1,350.00 has been received earmarked for the leaflet. This will allow us to obtain 10,000 leaflets. Hopefully, when you receive this NEWSLETTER the new brochure will be at the printers. Copies will be distributed to our membership when they are available.

\* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \*

#### THE LOGGERHEAD'S LEGACY

Imagine a starry night in the month of June, with an island beach outlined by full moon. Such is the time the sea turtles creep On land to nest; then return to the deep.

A head breaks surf and looks towards shore As her ancestors did ages before. This strange force which compels her so Is her legacy, but she doesn't know.

She leaves the surging endless tide, Eyes searching the brilliant beach so wide, Studded with seashells and pockets of foam; The first time she's left her safe sea home.

Thought dangers are many, with instinct so strong; No fear daunts her efforts, however long. She seeks the safest burial site To deposit her eggs in secret of night.

Slowly she struggles up the sand slope Bearing within her the continuing hope Of a new generation; like her, who shall be

Innocent and unwarned when they leave the sea. (To be continued)

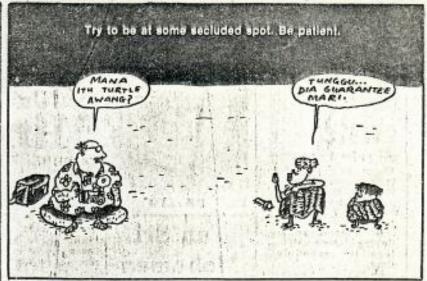
NEW STRAITS TIMES, TUESDAY, AUGUST 18, 1977

### SCENES OF MALAYSIAN LIFE Turtle blues II

by Lat

When you're down on the Rantau Abang beach, Trengganu, to have your big kick out of the turtle season, don't stick around the crowd. They go crazy easily.

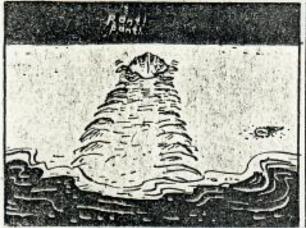




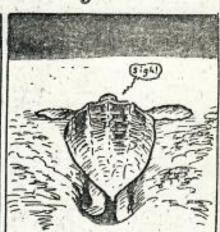


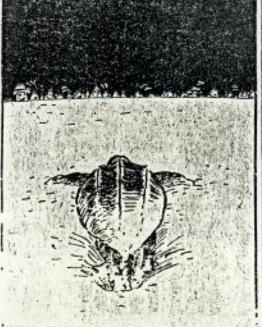
# Turtle blues

### by Lat











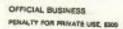
### Sighting Information • TURTLE and SEAL

Animal sighted (circle):	
Number of animals:	Type, if known: GREEN
Date: 3/19/89	- KI RAII
Time: 11 Am	Address & phone 6251 HAVAALA RD.  (optional) KARAA : Hi CONK
Location: MAHALEPUN	KAUAI (808)822-3708
	hore; boat (name: Busses Bolow);
while skin of SCUBA divi	ng(on surface or at 35 feet deep).
Estimated size (length):_	2 LONG (SHELL)
COMMENTS: (color pattern;	injuries; scar patterns; tumors;
har blood marks	, tag color, and if readable tag num-
EXAMPLED (2) MONICE	/letter); behavior; and weather.
DOWN FRANCE TO THE TOTAL OF THE PARTY OF THE	AMENT FISHING LINE (~3018 TEST) FLIPPOLS AND ARENTO NECK OFFP
CUTS AROUND NECK AL	64. SWIMMING ABILITY STILL GOO.
WE WELL UNABLE TO	CUT LINE FREE_

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE PISHERIES SERVICE
Southwest Fisheries Center Honolulu Laboratory
2570 Oole St. - Honolulu, Hawaii 25822-2288



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NATIONAL MARINE FISHERIES SERVICE Southwest Fisheries Center Honolulu Laboratory 2570 Dole St. + Honolulu, Hawaii 98822-2396

### SECOND INTERNATIONAL CONFERENCE ON MARINE DEBRIS

Honolulu, Hawaii 2-7 April 1989

### **ABSTRACTS**

### **OVERVIEW PAPERS (Chair - Brian Boyle)**

- "Marine debris in the North Pacific"

   James M. Coe
- 2. "Marine debris in the northwest Atlantic"
  - Burr Heneman
- "Plastics: Accumulation, distribution, and environmental effects of meso-, macro- and mega-litter in surface waters
  across the southwest Pacific to subantarctic New Zealand, and on adjacent shores"
  - Murray R. Gregory
- "The marine plastic debris problem off southern Africa: types of debris, their environmental effects, and control
  measures"
  - Peter G. Ryan
- 5. "Marine debris in the Antarctic"
  - Michael F. Tillman
- 6. "Cooperative research on petroleum pollution in the Caribbean: The CARIPOL Program"
  - Jorge E. Corredor and Julio M. Morell

### MARINE DEBRIS IN THE NORTH PACIFIC

James M. Coe National Marine Mammal Laboratory Northwest and Alaska Fisheries Center National Marine Fisheries Service, NOAA

7600 Sand Point Way, N.E., B4 Seattle, Washington 98115 U.S.A.

#### ABSTRACT

The earliest biological investigations and reports of the marine debris problem focused on North Pacific species, principally seabirds and marine mammals. This paper reviews research and management activities and results since 1984 addressing these and other marine debris related problems in the North Pacific. The governments of the United States and Japan have been the primary participants in these activities. While cooperation between U.S. and Japanese programs has been minimal, what is known about the Japanese program suggests that their efforts may be complimentary. Both programs include research and monitoring, mitigation technology, and education as evidenced by the variety of papers being presented at this conference. The effective implementation of the requirements of MARPOL Annex V, especially in the fishing industries of the North Pacific, is a common goal to most Pacific Rim nations. The fishing industries themselves have made significant commitments to address their contribution to the marine debris problem in the North Pacific. The effects of these actions on the known impacts of persistent debris in the North Pacific have yet to be realized.

MDII/89/Overview 2

### MARINE DEBRIS IN THE NORTHWEST ATLANTIC

Burr Heneman
Marine Mammal Commission
35 Horseshoe Hill Road
Star Route
Bolinas, California 94924 U.S.A.

### ABSTRACT

(Note: Abstract not available at press time. Report requested by Conference at & later date.)

1987

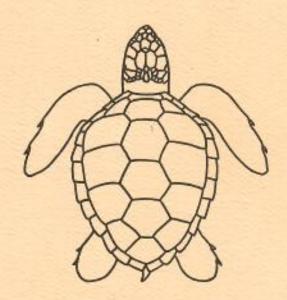
### ANNUAL REPORT

OF THE

# SEA TURTLE STRANDING AND SALVAGE NETWORK ATLANTIC AND GULF COASTS OF THE UNITED STATES JANUARY - DECEMBER 1987

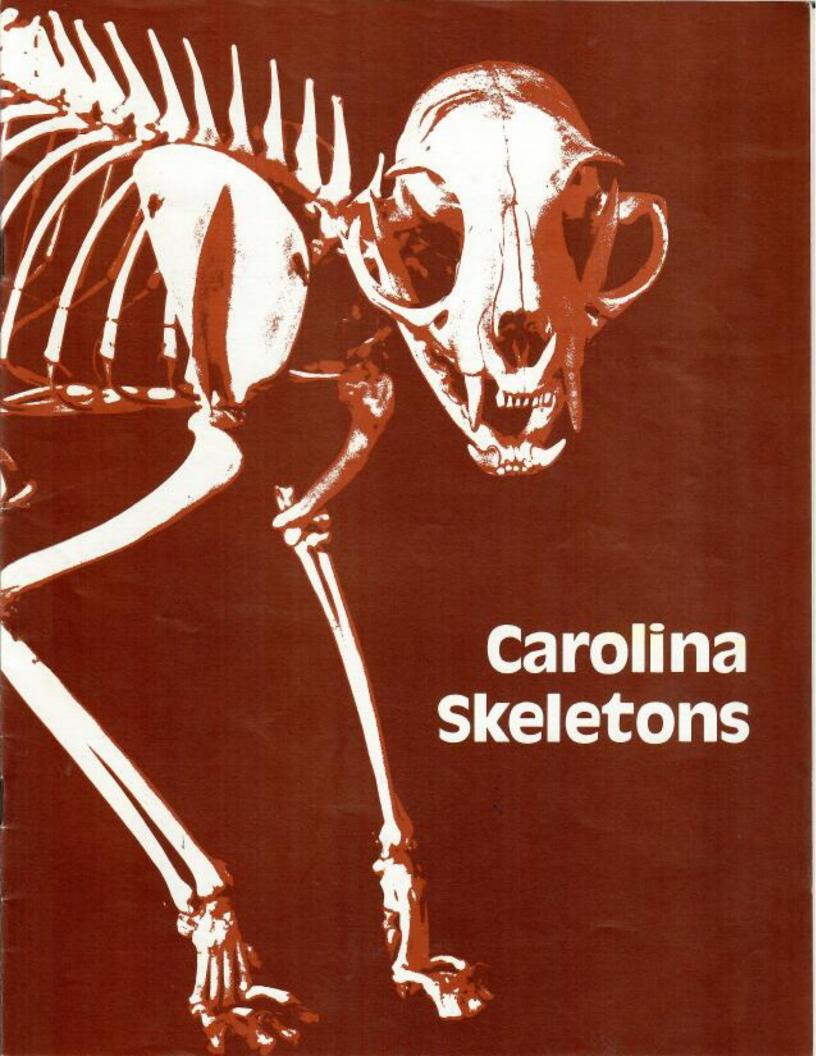
By

Barbara A. Schroeder and Amy A. Warner July 1988



National Marine Fisheries Service Southeast Fisheries Center Miami Laboratory Coastal Resources Division 75 Virginia Beach Drive Miami, FL 33149

Coastal Resources Division Contribution Number CRD-87/88-28



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