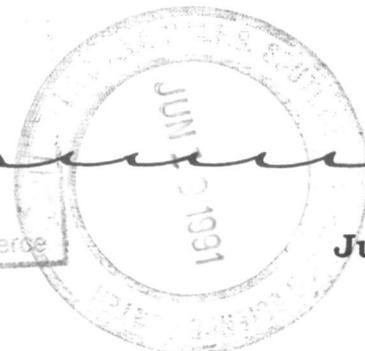




NOAA  
U.S. DEPT. OF COMMERCE



June 17, 1991

## NOAA Sets New Greenhouse Gas Standards

# Some Greenhouse Gas Estimates May Be Off 25%

Atmospheric scientists may be underestimating the amount of carbon monoxide in the atmosphere by as much as 25 percent because of inaccuracies in computer projections of global climate changes.

The possible error is reported by James W. Elkins of NOAA's Climate Monitoring and Diagnostics Laboratory in Boulder, Colo., and co-investigators Paul C. Novelli and L. Paul Steele in a paper to be published by the *Journal of*

Geophysical Research.

Novelli is with the Cooperative Institute for Research in Environmental Sciences, sponsored by NOAA and the University of Colorado; Steele, formerly with NOAA, works for the Australian Commonwealth Scientific and Industrial Research Organization.

Carbon monoxide, unlike carbon dioxide, is not a significant greenhouse gas, but it has important chemical interactions involved in the global greenhouse effect, which some scientists believe is causing the

earth to grow warmer. Created as a result of fossil fuel burning and industrial activity, carbon monoxide has an atmospheric lifetime of two to three months.

Producing a set of carbon monoxide reference mixtures for use by the NOAA climate investigators, the group found a discrepancy of almost 25 percent during a comparison test between its mixtures and those of a widely-used reference gas.

Earlier comparisons with other, less broadly-used car-

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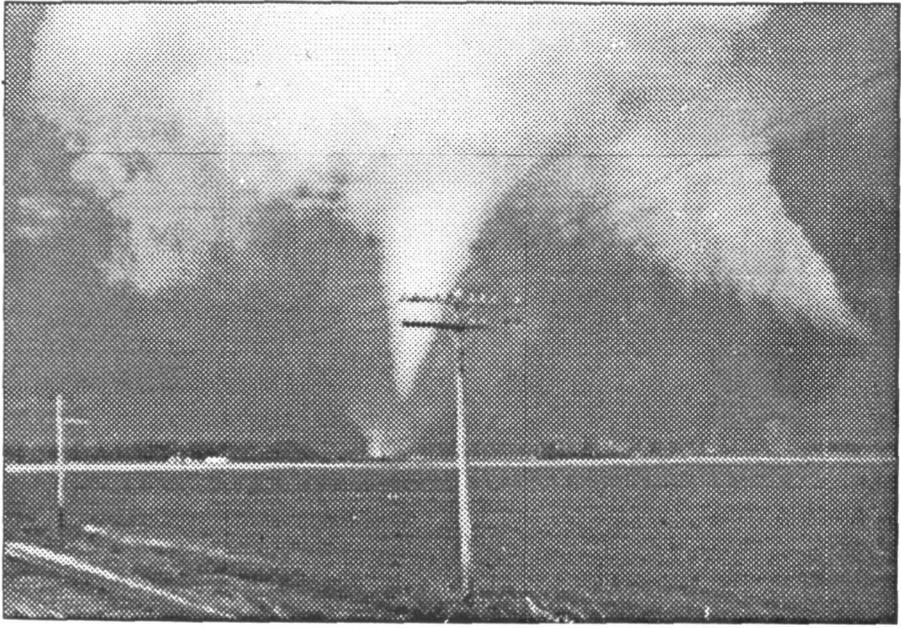
## Tornado Deaths Decrease Despite Record-breaking Season

NOAA's National Severe Storms Forecast Center reports tornado-related deaths have decreased significantly despite a record number of tornados this spring.

As of June 10, the country has seen 1033 tornados, compared with 841 for the same period last year. The states hit hardest by tornados are Texas with 183, Kansas with 148, and Oklahoma with 92.

The past two seasons have been record breakers. For the year 1990, there were 1132 tornados, exceeding the 1973

*continued on page 2*



Tornados vary greatly in size, intensity, and appearance. Average path lengths and widths are 26 miles and 425 yards respectively.

## Emergency Regulations Needed

# Regulations Proposed to Protect Atlantic Swordfish

NOAA has announced emergency regulations to protect and restore the declining Atlantic swordfish population.

The plan, released by NOAA's Marine Fisheries Service, will allow fisherman harvesting swordfish from the Atlantic, Gulf of Mexico, and the Caribbean waters to catch three million pounds of swordfish during each of two six-month periods from January to June and from July to Decem-

ber. For each season, swordfish entanglement net fishermen will be limited to a 30,044 pound swordfish quota and those using other allowable commercial gear, including longline and harpoon fisherman, will be limited to a 2,969,956 pound swordfish quota.

No more than 15% of the total number of swordfish on board for each trip can be less than 31 inches carcass length.

Based on landings to date,

NOAA fishery experts project the swordfish entanglement net quota will be reached and the fishery will be closed by the time the regulations become effective. Closure will be effective five days after a notice is filed with the Federal Register office.

The regulations also will prohibit the sale, barter or trade of recreationally-caught swordfish which can be taken only by rod-and-reel gear. Recreational fisherman are prohibited from having anything but rod-and-reel gear aboard their vessels and must also comply with the 31-inch size limit, but are not subject to a bag limit.

*Continued on page 4*

## Tornado Occurrences at Record High

*continued from page 1*

record of 1102, which stood for 17 years.

The total number of confirmed tornado-related deaths from January through May is 64. This year there have been only 35 deaths for the same time, according to NOAA's Severe Storms Forecast Center, a part of its National Weather Service. This drop indicates that the system for issuing tornado watches and warnings and for preparing and educating the public is making progress, said Frederick Ostby, director of the Severe Storms Forecast Center.

"Tornado frequency typically begins to diminish by mid - to late June, although tornados can occur any time of the year," said Ostby. ☺

## Henderson Tapped for NSSL Deputy Director Position

NOAA named James H. Henderson, former Deputy Director for the central region of the National Weather Service as Deputy Director of the Severe Storms Forecast Center in Kansas City, MO.

Henderson brings 28 years of broad experience in meteorology to his new position. In 1963 he worked for the Air Forces's Air Weather Service until 1967 when he became an agricultural meteorologist for the National Weather Service in Quincy, Fla. He received a master's degree in meteorology from Florida State University in 1969.

Henderson served as a research meteorologist at the National Severe Storms laboratory in Norman, Oklahoma, while working on his doctorate at the University of Oklahoma. From 1974 to 1976 he was an air pollution and fire weather forecaster in Birmingham, Ala., and then worked until 1984 as a tornado forecaster at NSSFC where he monitored U.S. atmospheric conditions and issued tornado and severe thunderstorm watches.

He was area manager for northern California from 1984 to 1987 and most recently served as deputy director of the Central Region for the National Weather Service. ☺

## Driftnet Fishery Indiscriminately Lethal

Japanese squid fisherman employing huge driftnet devices have killed unacceptable amounts of other marine wildlife, according to NOAA's National Marine Fisheries Service .

"The numbers of blue sharks, sea birds, tuna and porpoise being killed clearly indicate that driftnet fishery is indiscriminately lethal," said Dr. William W. Fox Jr., Assistant Administrator for NOAA's National Marine Fisheries Service.

"The numbers of species other than squid being killed is unacceptable to the U.S. and we strongly support the United Nations resolution calling for a moratorium on use of this equipment on the high seas by 1992," Fox added.

Multi-national observers

recorded that more than three million pomfret, 81,956 blue sharks, 30,464 sea birds, 253,288 tuna, and 1,758 whales and dolphins became innocent and incidental victims of driftnet fishing practices in 1990. And those figures represent only 10 percent of the total operating driftnet fleet of fishermen from Japan in the north Pacific Ocean.

A United Nations resolution calls for an end of use of large-scale driftnets by June, 1992 unless users can prove they can modify the technique, making it less harmful to non-

commercial species. Measures proposed by nations whose fishermen use these nets must be agreed upon by all signatories to the original UN resolution if the practice is to continue beyond that time.

Secretary of Commerce Robert A. Mosbacher and other U.S. officials have pressed for bi-lateral agreement with Japan, Taiwan and Korea to establish close monitoring of driftnet fishing in international waters. The agreement requires driftnet vessels to be equipped with satellite transponders monitored by Fisheries Service enforcement agents which would reveal when driftnet boats were fishing in restricted areas. ☺

## Seattle Scientists Clean Up: Public Service Awards

Three NOAA Hazardous Material Response Branch employees have received Coast Guard Public Service Awards for their performance during the cleanup of the Exxon Valdez oil spill. A ceremony in their honor took place at the agency's headquarters at Sand Point, Wa., on June 11.

The awards were presented by Rear Admiral Joseph E. Vorbach, Commander of the 13th Coast Guard District.

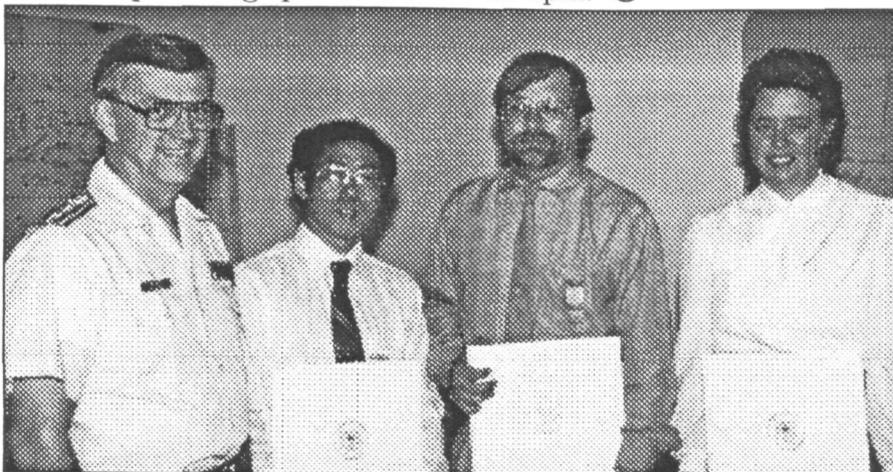
Sharon Christopherson received the Coast Guard's highest award for Distinguished Public Service. She was commended for her performance as the chairperson of the Interagency Shoreline Cleanup Committee (ISCC) and Research and Development Committee (R&D)

for Prince William Sound.

Dr. William J. Lehr and Glen Watabayashi each received an award for Meritorious Public Service. Dr. Lehr performed numerous overflights in the Kodiak Island and Shelikof Strait areas, and was recognized for providing specialized

observations on the movements of the oil.

Mr. Watabayashi was cited for his work as a member of NOAA's Modeling and Simulation Studies Group which supported the Coast Guard's response to the Exxon Valdez oil spill. ☺



RADM Joseph E. Vorbach with Glen Watabayashi, Dr. William J. Lehr and Sharon Christopherson during an award presentation.

## Solar Flare Activity Continues

Scientists from NOAA's Space and Environment Services Center in Boulder, Co. reported intense solar flare activity continuing, resulting in severe geomagnetic storms impacting much of the United States.

The solar disturbances have resulted in major proton events causing severe high-frequency radio communications interference, according to forecaster Norm Cohen at the joint NOAA-Air Force Space Environment Services Center in Boulder, Co.

### Highest Ever Recorded

Already five solar flares have occurred. The last was rated at X-12 plus, the highest intensity that can be recorded. Since the first of the month the sun has kicked off four X-12 plus flares and one X-10, resulting in an almost continuous geomagnetic storm for the past several days. ☺

These storms require managers of electrical power distribution networks, pipe lines, and satellites to take special preventive steps to avoid damage to their operations. ☺

## Swordfish Catch

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The quotas are based on 1990 recommendations by the international Commission for the Conservation of Atlantic Tunas (ICCAT) to reduce significantly the swordfish catches. ☺

## Carbon Monoxide Projections

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bon monoxide measuring reference gases produced by the National Institute of Standards and Technology and Scott-Marrin Inc., agreed with the NOAA gas to within 3 per cent of concentrations, Elkins said.

A number of additional reference gases have yet to be compared to the new NOAA standards, he said.

"Accurate knowledge of atmospheric carbon monoxide concentrations is important for a broader understanding of the complex series of oxidation reactions which occur in the atmosphere," the paper stated.

Elkins added: "We believe a better control over reference gases used to measure carbon monoxide is needed to better define differences in concentrations between laboratories". ☺

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Coming Events						June 1991	
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
16	17	18	19	20	21	22	
	Coral Bleaching Symposium & Workshop, EPA-NOAA-NSF sponsored meeting to examine the causes and extent of U.S. coral bleaching, Miami. <i>Thru June 25</i> →						
23	24	25	26	27	28	29	
NY Times cover story on Dr. Sylvia Earle, CS		Fed. Cmte for Meteo Services, Washington	North Pacific Anadromous Species Conservation meetings, Washington ← <i>Begins June 25</i>				

# **National Oceanic and Atmospheric Administration**

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