

WOODS HOLE LABORATORY REFERENCE DOCUMENT NO. 87-02

**NORTHEAST FISHERIES CENTER  
PUBLICATIONS AND REPORTS  
1986**

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9-17-87 (DATE)

U.S. Department of Commerce  
National Oceanic and Atmospheric Administration  
National Marine Fisheries Service  
Northeast Fisheries Center  
Woods Hole, MA 02543

February 6, 1987  
Revised August 12, 1987

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## INTRODUCTION

This listing of Northeast Fisheries Center publications and reports for 1986 follows the form of the compilation of Center publications for 1985 in that "gray" literature has been included in addition to formal (i.e., peer reviewed) publications. *Woods Hole Laboratory Reference Documents*, *ICES C.M. Documents*, and *NAFO SCR Documents*, in addition to some other non-peer reviewed documents have been included. From 1977 through 1983, the Center's formal publications were compiled by the Woods Hole Laboratory Library staff for the *Collected Reprints of the Northeast Fisheries Center*. The *Northeast Fisheries Center Publications and Reports* is now issued annually instead.

Part I of this compilation is an alphabetical list of the Northeast Fisheries Center's formal (peer-reviewed) publications by author's last name. Part II is an alphabetical list of the Northeast Fisheries Center's informal (non-peer reviewed) reports.

The listed publications and reports have been published to fulfill the mission of the Center to: 1) better understand the living marine resources (including marine mammals) of the northwest Atlantic ocean and the environmental quality essential for their existence and continued productivity; and 2) describe and provide to management, industry and the public, options for the utilization and conservation of living marine resources and maintenance of environmental quality which are consistent with national and regional goals and needs, and international commitments.

Users of these publications and reports include resource and habitat managers, commercial and recreational fisheries interests, the scientific community, academia, conservation and environmental organizations, seafood consumers, and the general public.

Acknowledgement is given to Center librarians Susie Hines (Oxford Laboratory), Claire Steimle (Sandy Hook Laboratory), and Barbara Sabo (Milford Laboratory) for compiling lists of their laboratory's publications and reports. Acknowledgement is also given to the following Center personnel for compiling lists of publications and reports: Judith Krzynowek - Resource Utilization Branch; Jennie Dunnington - Ecosystems Dynamics Branch; Joyce Denecour - Marine Climatology Branch; and Arlene McClain - National Systematics Laboratory.

## HOW TO OBTAIN A COPY OF A PUBLICATION

Copies of a publication or report listed in this compilation may be obtained by writing to the author. If the first author is not at the Northeast Fisheries Center, the author to write to is indicated in bold letters. If the scientist is no longer with the Northeast Fisheries Center, an instruction on how to obtain a copy is noted with the citation.

In "Part I. Peer Reviewed Publications," the geographic location of the laboratory of origin is given in bold letters after each citation. A complete mailing address is given below for each Northeast Fisheries Center laboratory location. Publication requests may be sent to the libraries at four of the locations (Milford, CT; Oxford, MD; Sandy Hook, NJ; and Woods Hole, MA).

Northeast Fisheries Center  
Gloucester Laboratory  
Emerson Avenue  
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Northeast Fisheries Center  
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Northeast Fisheries Center  
Milford Laboratory LIBRARY  
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Milford, CT 06460

Northeast Fisheries Center  
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RR7, South Ferry Road  
Narragansett, RI 02882

Northeast Fisheries Center  
Oxford Laboratory LIBRARY  
Oxford, MD 21654

Northeast Fisheries Center  
Sandy Hook Laboratory  
WALFORD LIBRARY  
Highlands, NJ 07732

Northeast Fisheries Center  
National Systematics Laboratory  
National Museum of Natural History  
10th and Constitution Avenue, NW  
Washington, DC 20560

## PUBLICATIONS AND REPORTS - 1986

### PART I. PEER REVIEWED PUBLICATIONS

- Able, Kenneth W., **Michael P. Fahay** and Douglas F. Markle. 1986.  
Development of larval snailfishes (Pisces: Cyclopteridae:  
Liparidinae) from the Western North Atlantic. *Canadian  
Journal of Zoology* 64: 2294-2316. (**Sandy Hook, NJ**)
- Ampola, Vincent G. and Cynthia L. Keller. 1986.  
Shelf life extension of drawn whole Atlantic cod, *Gadus  
morhua*, and cod fillets by treatment with potassium  
sorbate. *Marine Fisheries Review* 47(3): 26-29.  
(**Gloucester, MA**)
- Bishop, Gale A. and **Austin B. Williams**. 1986.  
The fossil lobster *Linuparus canadensis*, Carlile Shale  
(Cretaceous), Black Hills. *National Geographic Research*  
2(3): 372-387. (**Washington, DC**)
- Bodammer, Joel E. 1986.  
Ultrastructural observations on peritoneal exudate cells  
from the striped bass, pp. 127-140. In: *Fish Immunology*,  
Edited by J.S. Stolen, D.P. Anderson, and W.B. van  
Muiswinkel. Elsevier, New York. (**Oxford, MD**)
- Bowman, Ray E. 1986.  
Effect of regurgitation on stomach content data of marine  
fishes. *Environmental Biology of Fishes* 16(1-3): 171-181.  
(**Woods Hole, MA**)
- Brownlow, Judith. 1986.  
Sources for aquaculture information in the United States,  
pp. 55-59. In: *Marine Science Information: An  
International Commodity*, 240 p. Edited by R.L. Grundy, R.T.  
Ford and M.J. Beardsley. *Proceedings of the 11th Annual  
Conference of the International Association of Marine  
Science Libraries and Information Centers*, October 14-18,  
1985. (**Woods Hole, MA**)
- Cali, Ann, Peter M. Takvorian, **John J. Ziskowski** and Thomas K.  
Sawyer. 1986.  
Experimental infection of American winter flounder  
(*Pseudopleuronectes americanus*) with *Glugea stepani*  
(Microsporida). *Journal of Fish Biology* 28: 199-206.  
(**Milford, CT**)

- Chenoweth, Jean F., Sharon E. McGladdery, Carl J. Sindermann, **Thomas K. Sawyer** and Jeffrey W. Bier. 1986.  
An investigation into the usefulness of parasites as tags for herring (*Clupea harengus*) stocks in the western North Atlantic, with emphasis on use of the larval nematode *Anisakis simplex*. *Journal of Northwest Atlantic Fishery Science* 7: 25-33. (Oxford, MD)
- Cobb, J. Stanley, David Wang, **R. Anne Richards**, and Michael J. Fogarty. 1986.  
Competition among lobsters and crabs and its possible effects in Narragansett Bay, Rhode Island, pp. 282-290. In: North Pacific Workshop on Stock Assessment and Management of Invertebrates. Edited by G.S. Jamieson and N. Bourne. *Canadian Special Publication of Fisheries and Aquatic Sciences* 92. (Woods Hole, MA)
- Cohen, Daniel M. 1986.  
Families Bregmacerotidae, Moridae, and Melanonidae, p. 711-724. In: *Fishes of the North-eastern Atlantic and Mediterranean*, Vol. II. Edited by P.J.P. Whitehead et.al. UNESCO, Paris. (Washington, DC)
- Cohen, Daniel. M. 1986.  
Families No. 61, Argentinidae, pp. 215-216; No. 62, Bathylagidae, p. 216; No. 91, Melanonidae, pp. 320-329; No. 88, Gadidae, p. 324; No. 89, Merlucciidae, pp. 325-326; No. 90, Moridae, pp. 326-328; and No. 98, Bythitidae, pp. 354-356. In: *Smith's Sea Fishes*. Edited by Margaret Smith and Philip Heemstra. MacMillan South Africa, Johannesburg. (Washington, DC)
- Collette, Bruce B. 1986.  
Belonidae, pp. 385-387; Hemiramphidae, pp. 388-391; Scombridae, pp. 831-838. In: *Smith's Sea Fishes*. Edited by Margaret Smith and Philip Heemstra. MacMillan South Africa, Johannesburg. (Washington, DC)
- Collette, Bruce B. 1986.  
Coryphaenidae, pp. 845-846; and Scombridae, pp. 981-997. In: *Fishes of the North-eastern Atlantic and Mediterranean*, Vol. II. Edited by P.J.P. Whitehead, et.al. UNESCO, Paris. (Washington, DC)
- Collette, Bruce B. 1986.  
Families No. 113, Belonidae, pp. 385-387; No. 115, Hemiramphidae, pp. 388-391; and No. 249, Scombridae, pp. 831-838. In: *Smith's Sea Fishes*. Edited by Margaret Smith and Philip Heemstra. MacMillan South Africa, Johannesburg. (Washington, DC)

- Collette, Bruce B. 1986.  
Hemiramphidae. In: *Check-list of the freshwater fishes of Africa* 2: 163-164. Edited by J. Daget, J.-P. Gosse, and D.F.E. Thys van den Audenaerde. **(Washington, DC)**
- Collette, Bruce B. 1986.  
Resilience of the fish assemblage in New England tidepools. *Fishery Bulletin* 84(1): 200-204. **(Washington, DC)**
- Collette, Bruce B. and Roger F. Cressey. 1986.  
Occurrence of *Caligus coryphaenae* on *Thunnus thynnus* by Hogans (1985): corrections (Copepoda, Caligidae). *Crustaceana* 121(2): 220. **(Washington, DC)**
- Collette, Bruce B. and Nikolai V. Parin. 1986.  
Belonidae, pp. 604-609; and Hemiramphidae, pp. 620-622. In: *Fishes of the North-eastern Atlantic and Mediterranean*, Vol. II. UNESCO, Paris. **(Washington, DC)**
- Collette, Bruce B. and Jinxiang Su. 1986.  
The halfbeaks (Pisces: Beloniformes: Hemiramphidae) of the Far East. *Proceedings of the Philadelphia Academy of Sciences* Vol. 138. 52 p. **(Washington, DC)**
- Conservation and Utilization Division, Northeast Fisheries Center. 1986.  
Status of the fishery resources off the northeastern United States for 1986. *NOAA Technical Memorandum NMFS F/NEC-43*. 130 p. **(Woods Hole, MA)**
- Elston, Ralph A., C. Austin Farley and Michael L. Kent. 1986.  
Occurrence and significance of bonamiasis in european flat oyster *Ostrea edulis* in North America. *Diseases of Aquatic Organisms* 2: 49-54. **(Oxford, MD)**
- Farley, C. Austin. 1986.  
Book review....Diseases of marine animals, Vol. II. Introduction, Bivalvia to Scaphalopoda. Edited by G. Lauckner and O. Kinne. *Journal of Wildlife Diseases* 22: 608-609. **(Oxford, MD)**
- Farley, C. Austin. 1986.  
Epizootic sarcoma in Chesapeake Bay soft-shell clams -- a virus?, pp. 436-440. In: *Fundamental and Applied Aspects of Invertebrate Pathology*. Edited by R.A. Sampson, J.M. Vlak and D. Peters. Fourth International Colloquium on Invertebrate Pathology. Wageningen, The Netherlands. **(Oxford, MD)**

- Farley, C. Austin, Sarah V. Otto, and Carol L. Reinish. 1986.  
New occurrence of epizootic sarcoma in Chesapeake Bay soft  
shell clams, *Mya arenaria*. *Fishery Bulletin* 84: 851-857.  
**(Oxford, MD)**
- Fogarty, Michael and Josef S. Idoine. 1986.  
Recruitment dynamics in an American lobster (*Homarus  
americanus*) population. *Canadian Journal of Fisheries and  
Aquatic Sciences* 43(11): 2368-2376. **(Woods Hole, MA)**
- Fogarty, Michael and Steven A. Murawski. 1986.  
Population dynamics and assessment of exploited invertebrate  
stocks, pp. 228-244. In: North Pacific Workshop on Stock  
Assessment and Management of Invertebrates. Edited by G. S.  
Jamieson and N. Bourne. *Canadian Special Publication of  
Fisheries and Aquatic Science* No. 92. **(Woods Hole, MA)**
- George S.G., B.J.S. Pirie, **Anthony Calabrese** and Dean A.  
Nelson. 1986.  
Biochemical and ultrastructural observations of long-term  
silver accumulation in the mussel, *Mytilus edulis*. *Marine  
Environmental Research* 18(4): 255-265. **(Milford, CT)**
- Hanson, Peter J., John A. Wells and **Martin W. Newman**. 1986.  
Preliminary results of the 1984-85 National Benthic  
Surveillance Project: Southeast Atlantic and Gulf Coasts,  
pp. 572-577. *Oceans '86 Conference Proceedings*. **(Oxford,  
MD)**
- Hoey, John J. and John G. Casey. 1986.  
Shark longline fisheries: Gear and production  
characteristics. *Proceedings of the Gulf and Caribbean  
Fisheries Institute, 37th Annual Session*: 169-186.  
**(Narragansett)**
- Johnson, Phyllis T. 1986.  
Blue crab (*Callinectes sapidus*) viruses and the diseases  
they cause, pp. 13-19. In: *Proceedings of the National  
Symposium on the Soft-shelled Blue Crab Fishery*. Edited by  
H.M. Perry and R.F. Malone. Gulf Coast Research Laboratory,  
Biloxi, MS. **(Oxford, MD)**
- Johnson, Phyllis T. 1986.  
Parasites of benthic amphipods: ciliates. *Fishery Bulletin*  
84: 204-209. **(Oxford, MD)**
- Johnson, Phyllis T. 1986.  
Parasites of benthic amphipods: dinoflagellates. *Fishery  
Bulletin* 84: 605-614. **(Oxford, MD)**



- Johnson, Phyllis T., R.A. MacIntosh, and D.A. Somerton. 1986.  
Rhizocephalan infection in blue king crabs, *Paralithodes platypus*, from Olga Bay, Kodiak Island, Alaska. *Fishery Bulletin* 84(1): 177-184. (Oxford, MD)
- Learson, Robert J. and Joseph J. Licciardello. 1986.  
Literature reporting of shelf life data. What does it all mean? pp. 31-38. In: *Storage Lives of Chilled and Frozen Fish and Fish Products*. Butterworth and Co., Ltd., London. Also in: *International Journal of Refrigeration* 9: 179-181. (Gloucester, MA)
- Licciardello, Joseph J., Elinor M. Ravesi and Daniel L. D'Entremont. 1986.  
Irradiation and potassium sorbate compared as preservative treatments for Atlantic cod, *Gadus morhua*. *Marine Fisheries Review* 48(3): 38-41. (Gloucester, MA)
- Licciardello, Joseph J., Elinor M. Ravesi, G.M. Gerow and Daniel L. D'Entremont. 1986.  
Storage characteristics of iced whole Loligo squid, pp. 249-257. In: *Storage Lives of Chilled and Frozen Fish and Fish Products*. London, Butterworth and Co., Ltd.. (Gloucester, MA)
- Murchelano, Robert A., Linda Despres-Patanjo and John Ziskowski. 1986.  
A histopathologic evaluation of gross lesions excised from commercially important North Atlantic marine fishes. *NOAA Technical Report NMFS* 37. (Woods Hole, MA)
- Nascimento, Iracema A., Donald H. Smith, Frederick Kern II and Solange A. Pereira. 1986.  
Pathological findings in *Crassostrea rhizophorae* from Todos os Santos Bay, Bahia, Brasil. *Journal of Invertebrate Pathology* 47: 340-349. (Oxford, MD)
- Overholtz, William J. and Albert Tyler. 1986.  
An exploratory simulation model of competition and predation in a demersal fish assemblage on Georges Bank. *Transactions of the American Fisheries Society*: 115: 805-817. (Woods Hole, MA)
- Overholtz, William J., Michael P. Sissenwine and Stephen H. Clark. 1986.  
Recruitment variability and its implication for managing and rebuilding the Georges Bank haddock (*Melanogrammus aeglefinus*) stock. *Canadian Journal of Fisheries and Aquatic Sciences* 43(4): 748-753. (Woods Hole, MA)

- Pacheco, Anthony L. 1986.  
Recreational fisheries and the environment: Past, present, and future. *Sandy Hook Laboratory Technical Series Report* No. 32. **(Sandy Hook, NJ)**
- Payne, Michael P., John R. Nicolas, Loretta O'Brien and Kevin D. Powers. 1986.  
The distribution of the humpback whale, *Megaptera novaengliae*, on Georges Bank and in the Gulf of Maine in relation to densities of the sand eel, *Ammodytes americanus*. *Fishery Bulletin* 84(2): 271-278. **(Woods Hole, MA)**
- Pennington, Michael. 1986.  
Some statistical techniques for estimating abundance indices from trawl surveys. *Fishery Bulletin* 84(3): 519-525. **(Woods Hole, MA)**
- Perez Farfante, Isabel and Billy B. Boothe, Jr. 1986.  
Redescription and range extension of the shrimp *Parapenaeopsis balli* (Decapoda: Penaeidae). *Journal of Crustacean Biology* 6(3): 401-407. **(Washington, DC)**
- Richards, R. Anne and J. Stanley Cobb. 1986.  
Competition for shelter between lobsters (*Homarus americanus*) and Jonah crabs (*Cancer borealis*): effects of relative size. *Canadian Journal of Fisheries and Aquatic Sciences* 43(11): 2250-2255. **(Woods Hole, MA)**
- Robohm, Richard A. 1986.  
Paradoxical effects of cadmium exposure on antibacterial antibody responses in two fish species: inhibition in cunners (*Tautoglabrus adspersus*) and enhancement in striped bass (*Morone saxatilis*). *Veterinary Immunology and Immunopathology* 12: 251-262. **(Milford, CT)**
- Ross, Michael R. and Frank P. Almeida. 1986.  
Density-dependent growth of silver hakes. *Transactions of the American Fisheries Society* 115(4): 548-554. **(Woods Hole, MA)**
- Serchuk, Fredric M. and Susan E. Wigley. 1986.  
Evaluation of USA and Canadian research vessel surveys for sea scallops (*Placopecten magellanicus*) on Georges Bank. *Journal of Northwest Atlantic Fishery Science* 7(1): 1-13. **(Woods Hole, MA)**
- Shepard, Andrew N., Roger B. Theroux, Richard A. Cooper and Joseph R. Uzzmann. 1986.  
Ecology of *Ceriantharia* (Coelenterata, Anthozoa) of the Northwest Atlantic from Cape Hatteras to Nova Scotia. *Fishery Bulletin* 84(3): 625-646. **(Woods Hole, MA)**

- Sherman, Kenneth. 1986.  
 Fisheries research strategies for the 1990's, pp. 159-165.  
 In: *Rethinking Fisheries Management*. Center for Ocean  
 Management Studies. University of Rhode Island, Kingston,  
 RI. **(Narragansett, RI)**
- Sherman, Kenneth. 1986.  
 1. Introduction to Parts One and Two: Large marine  
 ecosystems as tractable entities for measurement and  
 management, pp. 3-7. In: *Variability and Management of  
 Large Marine Ecosystems*. Edited by K. Sherman and L.M.  
 Alexander. AAAS Selected Symposium 99. Westview Press,  
 Boulder, CO. 319 p. **(Narragansett, RI)**
- Sherman, Kenneth. 1986.  
 Measurement strategies for monitoring and forecasting  
 variability in large marine ecosystems, pp. 203-236. In:  
*Variability and Management of Large Marine Ecosystems*.  
 Edited by Kenneth Sherman and Lewis M. Alexander. AAAS  
 Selected Symposium 99, Westview Press, Boulder, CO. 319 p.  
**(Narragansett, RI)**
- Sherman, Kenneth. 1986.  
 Research needs. Introduction to Part Five, pp. 157-158.  
 In: *Rethinking Fisheries Management*. Center for Ocean  
 Management Studies, University of Rhode Island, Kingston,  
 RI. 1986. **(Narragansett, RI)**
- Sherman, Kenneth and Lewis M. Alexander, editors. 1986.  
*Variability and Management of Large Marine Ecosystems*. AAAS  
 Selected Symposium 99, Westview Press, Boulder, CO. 319  
 p. **(Narragansett, RI)**
- Sissenwine, Michael P. 1986.  
 Perturbation of a predator-controlled continental shelf  
 ecosystem, pp. 55-85. In: *Variability and Management of  
 Large Marine Ecosystems*. Edited by K. Sherman and L.M.  
 Alexander. AAAS Selected Symposium 99, Westview Press,  
 Boulder, CO. 319 p. **(Woods Hole, MA)**
- Steimle, Frank W., Paul D. Boehm, Vincent S. Zdanowicz and Ralph  
 A. Bruno. 1986.  
 Organic trace metal levels in ocean quahog, *Arctica  
 islandica* Linne, from the northwestern Atlantic. *Fishery  
 Bulletin* 84(1): 133-140. **(Sandy Hook, NJ)**
- Steimle, Frank W. and Russell Terranova. 1985.  
 Energy equivalents of marine organisms from the continental  
 shelf of the temperate Northwest Atlantic. *Journal of  
 Northwest Atlantic Fishery Science* 6: 117-124. **(Sandy  
 Hook, NJ)** (omitted from 1985 list)

Stoddard, A., John E. O'Reilly, T.E. Whitley, T.C. Malone and J.F. Hebard. 1986.  
The application and development of a comparable historical data base for the analysis of water quality management issues in the New York Bight, pp. 1030-1035. In: *Oceans '86 Conference Proceedings*. (Sandy Hook, NJ)

Tinker, Burton L., Joseph W. Slavin, Robert J. Learson and Vincent G. Ampola. 1986.  
Evaluation of automated time-temperature monitoring systems in measuring the freshness of chilled fish, pp. 281-291. Section 7, Improving and monitoring traditional handling of chilled fish. In: *Storage Lives of Chilled and Frozen Fish and Fish Products*. Butterworth and Co., Ltd., London. (Gloucester, MA)

White, Alan W., J. L. Martin, M. Legresley and Walter J. Blogoslawski. 1986.  
Inability of ozonation to detoxify paralytic shellfish toxins in soft-shell clams, pp. 473-478. In: *Toxic dinoflagellates*. Proceedings of the 3rd International Conference. June 8-12, 1985. St. Andrews, New Brunswick, Canada. Elsevier, New York. (Milford, CT)

Wikfors, Gary H. 1986.  
Altering growth and gross chemical composition of two microalgal molluscan food species by varying nitrate and phosphate. *Aquaculture* 59: 1-14. (Milford, CT)

Wilhelm, Kurt A. 1986  
Modified/controlled atmosphere packaging of fish, pp. 281-287. *Proceedings of the Second International Conference and Exhibition on Controlled Atmosphere Packaging* (Gloucester, MA)

Wilhelm, Kurt A. 1986.  
Surimi and surimi-product labeling. *Quarterly Bulletin of the Food and Drug Officials* 50(3): 143-144. (Gloucester, MA)

Williams, Austin B. 1986.  
Foreward. In: *Estuarine Variability*. Edited by D.A. Wolfe. Academic Press, New York. (Washington, DC)

Williams, Austin B. 1986.  
Lobsters -- identification, world distribution, and U.S. trade. *Marine Fisheries Review* 48(1): 1-36. (issued in 1987) (Washington, DC)

- Williams, Austin B. 1986.  
Mud shrimps (*Upogebia*) of the eastern Pacific  
(Thalassinidea: Upogebiidae). *San Diego Society of  
Natural History Memoires* 14: 1-60. **(Washington, DC)**
- Williams, Austin B. and Darryl L. Felder. 1986.  
Analysis of stone crabs: *Menippe mercenaria* (Say),  
restricted, and previously unrecognized species described  
(Decapoda: Xanthidae). *Proceedings of the Biological  
Society of Washington* 99(3): 517-543. **(Washington, DC)**
- Williams, Austin B. and Peter A. Rona. 1986.  
Two new caridean shrimps (Bresiliidae) from a hydrothermal  
field on the Mid-Atlantic Ridge. *Journal of Crustacean  
Biology* 6(3): 446-462. **(Washington, DC)**
- Williams, Austin B. and Ruth D. Turner. 1986.  
Squat lobsters (Galatheidae: *Munidopsis*) associated with  
mesh-enclosed wood panels submerged in the deep sea.  
*Journal of Crustacean Biology* 6(3): 617-624. **(Washington,  
DC)**
- Wolke, R.E., **Robert A. Murchelano**, C.D. Dickstein and C.J.  
George. 1985.  
Preliminary evaluation of the use of macrophage aggregates  
(MA) as fish health monitors. *Bulletin of Environmental  
Contamination and Toxicology* 35: 222-227. **(Woods Hole, MA)**  
(Not included in 1985 list)
- Zdanowicz, Vincent S., Donald F. Gadbois and Martin W. Newman.  
1986.  
Levels of organic and inorganic contaminants in sediments  
and fish tissues and prevalances of pathological disorders  
in winter flounder from estuaries of the northeast United  
States, 1984, pp. 578-585. In: *Oceans '86 Conference  
Proceedings*. **(Sandy Hook, NJ)**

## PART II: NON-PEER REVIEWED PUBLICATIONS AND REPORTS

Almeida, Frank, Michael J. Fogarty, Stephen H. Clark and Josef S. Idoine. 1986.

An evaluation of precision of abundance estimates derived from bottom trawl surveys off northeastern United States. *ICES C.M.* 1986/G:91. **(Woods Hole, MA)**

Armstrong, Reed S. 1986.

Bottom temperatures on the continental shelf and slope southeast of Sandy Hook, New Jersey, in 1983. *Annales Biologiques* 40: 14-16. **(Narragansett, RI)**

Armstrong, Reed S. 1986.

Variation in the shelf-water front position from Georges Bank to Cape Romain in 1983. *Annales Biologiques* 40: 20-22. **(Narragansett, RI)**

Armstrong, Reed S. 1986.

Variation in the shelf water front position in 1985 from Georges Bank to Cape Romain. *NAFO SCR Document* 86/74. **(Narragansett, RI)**

Benway, Robert L. 1986.

Water column thermal structure across the shelf and slope southeast of Sandy Hook, New Jersey in 1985. *NAFO SCR Document* 86/76. **(Narragansett, RI)**

Bolgiano, N.C., Ganapati P. Patil, and **Robert N. Reid**. 1986.

A study of the relationship between diversity indices of benthic communities and heavy metal concentrations of northwest Atlantic sediments. Pennsylvania State University Center for Statistical Ecology and Environmental Statistics. Technical Report 86-1204. **(Sandy Hook, NJ)**

Bolz, George and R. Gregory Lough. 1986.

Zooplankton faunal zones and their relationship to hydrography and ichthyoplankton production in the Georges Bank Region. *NAFO SCR Document* 86/105. **(Woods Hole, MA)**

Casey, John G., Harold L. Pratt and Charles E. Stillwell. 1986.

*The Shark Tagger - 1985 annual summary*. 10 p. **(Narragansett, RI)**

Casey, John G., Harold L. Pratt and Charles E. Stillwell. 1986.

*The Shark Tagger - 1986 annual summary* 2 p. **(Narragansett, RI)**

- Cohen, Edward, David G. Mountain and R. Gregory Lough. 1986.  
Possible factors responsible for variable recruitment of the  
1981, 1982 and 1983 year classes of haddock (*Melanogrammus*  
*aeglefinus* L.) on Georges Bank. *NAFO SCR Document* 86/110.  
**(Woods Hole, MA)**
- Cohen, Edward, David G. Mountain and Robert N. O'Boyle. 1986.  
Absence of large scale coherence in cod and haddock  
recruitment in the Northwest Atlantic. *ICES C.M.*  
1986/G:89. **(Woods Hole, MA)**
- Cole, Charles F., Carolyn A. Griswold, V. Henderson, F. Eugene  
Hester, T. Modde, Richard L. Noble, G. Purdue, Nick C. Parker,  
Douglas C. Peterson, William F. Royce, and Paul J. Wingate 1986.  
A professional umbrella for the 80's. Report of the 1983-84  
Professionalism Committee. *Fisheries* 11(6): 22-28.  
**(Narragansett, RI)**
- Conservation and Utilization Division, Northeast Fisheries  
Center. 1986.  
Report of the Second NEFC Stock Assessment Workshop (Second  
SAW). *Woods Hole Laboratory Reference Document* No.86-09.  
**(Woods Hole, MA) (Request from Library)**
- Conservation and Utilization Division, Northeast Fisheries  
Center. 1986.  
Report of the Third NEFC Stock Assessment Workshop (Third  
SAW). *Woods Hole Laboratory Reference Document* No. 86-14.  
**(Woods Hole, MA) (Request from library)**
- Cook, Steven K. 1986.  
Water column thermal structure across the shelf and slope  
southeast of Sandy hook, New Jersey, in 1983. *Annales*  
*Biologiques* 40: 12-14. **(Narragansett, RI)**
- Cornillion, Peter G., Sushmito Ghosh, **Kenneth Sherman**, Jack  
Green, Wallace Smith, Mark Berman and Julian Goulet. 1986.  
Time-series analysis of thermal structure in the Gulf of  
Maine and Georges Bank in relation to biological  
variability. *ICES C.M.* 1986/L:21 **(Narragansett, RI)**
- Draxler, Andrew F.J. 1986.  
Progress of studies at the sewage sludge accumulation site  
in anticipation of dumping cessation. *Sandy Hook Laboratory*  
*Report* 86-01. **(Sandy Hook, NJ)**
- Finn, John T., **Steven A. Murawski**, and Josef S. Idoine. 1986.  
Response surface sensitivities analyses of multispecies  
virtual population analyses. *ICES ad hoc Multispecies*  
*Working Group.* 24 p. **(Woods Hole, MA)**

- Fogarty, Michael J. 1986.  
Population dynamics of the American lobster (*Homarus americanus*). Ph. D. Dissertation. University of Rhode Island. **(Woods Hole, MA)**
- Fogarty, Michael J. and Josef S. Idoine. 1986.  
Population assessment of the American lobster on the Outer Continental Shelf. *Woods Hole Laboratory Reference Document* No. 86-01. **(Woods Hole, MA)**
- Fogarty, Michael J., Josef S. Idoine, Frank P. Almeida and Michael Pennington. 1986.  
Modelling trends in abundance based on research vessel surveys. *ICES C.M.* 1986/G:92. **(Woods Hole, MA)**
- Foster, Karen L. 1986.  
Status of winter flounder (*Pseudopleuronectes americanus*) stocks in the Gulf of Maine, Southern New England and Middle Atlantic areas. *Woods Hole Laboratory Reference Document* No. 86-17. **(Woods Hole, MA)**
- Gabriel, Wendy L. and Karen L. Foster. 1986.  
Preliminary assessment of winter flounder (*Pseudopleuronectes americanus* Walbaum) on Georges Bank. *Woods Hole Laboratory Reference Document* No. 86-16. **(Woods Hole, MA)**
- Grosslein, Marvin D. 1986.  
Synopsis of knowledge of the recruitment process for Atlantic herring with special reference to Georges Bank. *NAFO SCR Document* 86/104. **(Woods Hole, MA)**
- Grosslein, Marvin D. 1986.  
Use of trawl survey data for mapping yield potential of fishery resources of the northeast shelf ecosystem. *ICES C.M.* 1986/L:24. **(Woods Hole, MA)**
- Hughes, James B., David A. Nelson, Dean M. Perry, James E. Miller, George R. Sennefelder and Jose J. Pereira. 1986.  
Reproductive success of the winter flounder (*Pseudopleuronectes americanus*) and water quality in Long Island Sound. *ICES C.M.* 1986/E:10. **(Milford, CT)**
- Ingham, Merton C. 1986.  
Sea surface temperature in the northwestern Atlantic in 1985. *NAFO SCR Document* 86/75. **(Narragansett, RI)**
- Jossi, Jack W. 1986.  
Surface temperatures and satellites: Massachusetts to Cape Sable, N.S., and New York to the Gulf Stream, 1984. *Annales Biologiques* 41: 26-28. **(Narragansett, RI)**



- Jossi, Jack W. and Daniel E. Smith. 1986.  
The continuous plankton recorder survey: Massachusetts to Cape Sable, N.S., and New York to the Gulf Stream, 1984. *Annales Biologiques* 41: 59-62. **(Narragansett, RI)**
- Jossi, Jack W. and Daniel E. Smith. 1986.  
Continuous plankton records: Massachusetts to Cape Sable, N.S. and New York to the Gulf Stream, 1983. *Annales Biologiques* 40: 61-63. **(Narragansett, RI)**
- Lough, R. Gregory. 1986.  
Chaetognaths and oceanography on Georges Bank. *NAFO SCR Document* 86/100. **(Woods Hole, MA)**
- Maurer, Ray O., Steven A. Murawski and Fredric M. Serchuk. 1986.  
United States research report for 1985. *NAFO SCS Document* 86/9. **(Woods Hole, MA)**
- McClain, Douglas R. and **Herton C. Ingham**. 1986.  
Sea surface temperatures in the northwestern Atlantic in 1983. *Annales Biologiques* 40: 16-19. **(Narragansett, RI)**
- Michaels, William L., Brian P. Hayden and Ray E. Bowman. 1986.  
Stomach content data of marine fish collected from NEFC surveys during 1977 - 80; Data report of priority species - Part I. *Woods Hole Laboratory Reference Document* No. 86-18. **(Woods Hole, MA)**
- Michaels, William L., Brian P. Hayden and Ray E. Bowman. 1986.  
Stomach content data of marine fish collected from NEFC surveys during 1977 - 80; Data report of miscellaneous species - Part II. *Woods Hole Laboratory Reference Document* No. 86-19. **(Woods Hole, MA)**
- Murawski, Steven A. 1986.  
Assessment updates for Middle Atlantic, New England and Georges Bank offshore surf clam, *Spisula solidissima* populations - summer 1986. *Woods Hole Laboratory Reference Document* No. 86-11. **(Woods Hole, MA)**
- Murawski, Steven A. 1986.  
A brief outline of the estimation and importance of fishery discards to assessment calculations. *Working Paper, ICES Assessment Methods Working Group*. 10 p. **(Woods Hole, MA)**
- NOAA/FDA/EPA. 1986.  
Report on 1984-86 Federal survey of PCBs in Atlantic coast bluefish - data report. Washington, DC. NTIS No. PB86 218070/AS. **(Sandy Hook, NJ)**

- Olsen, Paul and **John Mahoney**. 1986.  
Monitoring red tides in New Jersey. *New Jersey Outdoors*  
**(Sandy Hook, NJ)**
- Parker, C.A., **John E. O'Reilly**, and R.B. Gerzoff. 1986.  
Historical trends assessment program oxygen depletion in  
Long Island Sound. Oceans Assessment Division. U.S.  
Department of Commerce. Rockville, MD. **(Sandy Hook, NJ)**
- Pearce, John B., B.I. Dybern, J. Portmann and J. Uthe. 1986.  
A review of the North Atlantic Working Group and its  
continuation of activities. *ICES C.M.* 1986/E:48. **(Woods  
Hole, MA)**
- Peterson, Allen E., Jr. 1986.  
The political struggle: Atlantic salmon. *Rod & Reel*,  
Jan./Feb.: 37-38. **(Woods Hole, MA)**
- Phoel, W., Robert Reid, David Radosh, P. Kube, and S. Fromm.  
1986-87.  
In situ observations of the water column, sediments and  
biota at the New York Bight acid waste dumpsite and a  
control area. *Coastal Ocean Pollution Assessment News* 3:  
53-57. **(Sandy Hook, NJ)**
- Price, Carol A. and Kenneth Barton. 1986.  
Anticyclonic warm core Gulf Stream rings off the  
northeastern United States during 1985. *NAFO SCR Document*  
86/77. **(Narragansett, RI)**
- Price, Carol A. and Peter J. Celone. 1986.  
Anticyclonic warm-core Gulf Stream rings off the  
northeastern United States in 1983. *Annales Biologiques*  
40: 22-28. **(Narragansett, RI)**
- Ropes, John W. 1986.  
Measuring the age of ocean quahogs. *Maritimes* 30(3): 8-  
10. **(Woods Hole, MA)**
- Serchuk, Fredric M. and Susan E. Wigley. 1986.  
Abundance, size composition, and recruitment of sea scallops  
in the USA, Georges Bank, and Mid-Atlantic regions: Results  
of the 1986 USA Sea Scallop Research Vessel Survey. *Woods  
Hole Laboratory Reference Document No.* 86-15. **(Woods Hole,  
MA)**
- Serchuk, Fredric M. and Susan E. Wigley. 1986.  
Assessment and status of the Georges Bank and Gulf of Maine  
Atlantic cod stocks - 1986. *Woods Hole Laboratory Reference  
Document No.* 86-12. **(Woods Hole, MA)**

- Serchuk, Fredric M. and Susan E. Wigley. 1986.  
Status of the sea scallop resources off the northeast coast of the United States, 1986. *Woods Hole Laboratory Reference Document* No. 86-08. **(Woods Hole, MA)**
- Shepard, Gary. 1986.  
Evaluation of the river herring by-catch in the mackerel fishery. *Woods Hole Laboratory Reference Document* No. 86-10. **(Woods Hole, MA)**
- Sherman, Kenneth. 1986.  
Report of activities of the Biological Oceanography Committee for 1985. *ICES C.M.* 1986/L:1. **(Narragansett, RI)**
- Sherman, Kenneth and Alan Ryan. 1986.  
Toward total international management of the Antarctic ecosystem. *Maritimes* 30(1): 6-8. **(Narragansett, RI)**
- Smith, Wallace and Ellen Johnson. 1986.  
Contrasts in distribution patterns of larval Atlantic herring in the Georges Bank area, early 1970's vs. early 1980's. *NAFO SCR Document* 86/93. **(Sandy Hook, NJ)**
- Waring, Gordon T. 1986.  
An analysis of spatial differences in size composition and abundance of butterfish, *Peprilus triacanthus*, off the northeast United States. *Woods Hole Laboratory Reference Document* No. 86-04. **(Woods Hole, MA)**
- Waldauer, Ruth I. Andrew F.J. Draxler and I. Desvousges. 1986.  
Influence of warm core rings on the nutrient environment of phytoplankton. *Sandy Hook Laboratory Report* 86-02. **(Sandy Hook, NJ)**
- Wheeler, Charles L. 1986.  
A record of air and surface water temperatures in Great Harbor, Woods Hole, Massachusetts, 1962-1981. *Woods Hole Laboratory Reference Document* No. 86-02. **(Woods Hole, MA)**  
**(Request from Library)**
- Wigley, Susan and Wendy Gabriel. 1986.  
Distribution of sexually immature components of ten NW Atlantic groundfish stocks, based on Northeast Fisheries Center bottom trawl surveys, 1968-1981. *Woods Hole Laboratory Reference Document* No. 86-13. **(Woods Hole, MA)**

