

Aquatic Nuisance Species Timeline

By Pam Fuller, Peter Moyle, and Charlie Brown

1975

reed manna grass
(*Glyceria maxima*)

wetland nightshade
(*Solanum*

cederstroemi)

1985

shimofuri goby
(*Tridentiger bifasciatus*)

are serving in leadership positions at the parent society level at a rate proportional to or greater than their composition in the general membership (Table 1).

Table 1. Number and percentage of women in AFS, 1964–2000.

1964	13 (0.6%)
1982	422 (5%)
1991	736 (12%)
2000	1,425 (16%)

Trends in education suggest that the number of women in fisheries will continue to increase,

years or less) were female, nearly equivalent to the proportion (38%) of individuals earning fisheries degrees at the Master's level during

Table 2. Women receiving degrees in fish and wildlife management (1977–1978) and fisheries (1996–1997) as a percent of total degrees in those fields.*

* National Center for Education Statistics, U.S. Department of Education

Information on changes in ethnic minorities as members of AFS is less complete, given the limitations of optional reporting and delineation of ethnic categories. In the first year of reporting (1991), about 4.2% of male respondents and 7.2% of female responded with an ethnicity of Asian, Hispanic, Native American, or Black, in

of women and minorities. The Section works with the International Fisheries and Native Peoples Sections, the Student Subsection, and other AFS units to collaborate on these issues.

The Strategic Plan of the AFS, 1999–2004, reinforces the goal of increasing the professional and social diversity of its membership. The plan outlines strategies of recruitment, retention, and awareness to be implemented across the various units and activities of the organization. Trends over the past 25 years indicate that these goals can be achieved with continued effort through the next quarter century and beyond. ➤

Women as AFS Presidents

Christine Moffitt, AFS past-president

she got her start during World War I, when there was a severe shortage of men. A strong advocate of research, Moffitt's early studies were in

to moderate the many names that they found, and worked for 14 years to complete the survey, ending during World War II.

It was more than 55 years before AFS installed another female president, Janice S. Hughes from Louisiana (1983). Hughes was active in fish culture and served as president of the Fish Culture Section in 1980–1981.

Shortly afterward, in 1985, Johanna Reinhart was elected AFS president. Reinhart had been active in the North Central Division serving as



Female AFS presidents have included Emmeline Moore (1927), Janice Hughes (1983), Johanna Reinhart (1985), and Christine Moffitt (1999).

secretary-treasurer for several years, and served the parent society as chair of the Internationalism Committee, working to address the concerns of AFS members outside the United States. As AFS president, Reinhart charged the Society to begin its first long-range planning activity.

The fourth female president of AFS, Christine Moffitt, just completed her term in August 2000. Moffitt's other activities included associate editor, Chapter president, secretary-treasurer of the Western Division, chair of the committee to revise

the professional code of conduct, and chair of the Membership Concerns Committee that conducts and analyzes several member surveys. ➤

Computer Technology in Fisheries

Michael D. Porter, Computer User Section president

Many changes in computer technology over the past 25 years have become important tools for fisheries biologists. In the 1970s, mainframe computers were expensive, with few software applications. The Computer User Section started in 1985 as a users group for desktop computers, sharing programming tips and reviewing software. Database and spreadsheet software empowered biologists with tools for managing and analyzing data.

Recognizing the value of computer skills for resource management, computer courses were added to the educational recommendations of the Society. Geographic information systems (GIS) developed during this period.

Decreasing size and more powerful computers spawned new technologies in the 1990s. The Open Source movement has demonstrated the advantages of peer-reviewed program development over monolithic programming. Increased computing power brought GIS to the desktop, with fisheries GIS developing its own analysis tools. Handheld computers are moving computing to the field. Data collection is a time intensive activity for fisheries biologists. The capability of collecting data electronically increases the potential for computer analyses by fisheries biologists. GIS is becoming an essential tool for fish biologists. The Computer User Section sponsors workshops, e-notes, and a Section newsletter to educate fisheries biologists about computer applications. ➤

Thanks to these generous volunteers, *Fisheries* has been able to provide important scientific information to its audience.

Fisheries Science Editors

- Richard S. Wydoski 1978–1984
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- William W. Taylor 1992–1995
- Maury Osborn 1995–1996
- David C. Burns 1995–1997
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- Mel Warren 1999–present
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Fisheries Book Review Editors

- John Magnuson 1978–1979
- John J. Ney 1979–present
- Richard Neves 1986–1998
- Robert R. Stickney (aquaculture) 1995–present
- Patricia Flebbe (new titles) 1998–present

American Fisheries Society Vital Statistics 1976–2001			
Individual Membership	Staff	Book Titles (in print)	Sections
1976 = 24,100	10	1976 = 116	1976 = 23
2001 = 34,053	2001 = 20	2001 = 69	2001 = 21
AFS Operating Budget	Journals	Chapters	Dues (regular)
1976 = \$1,000,000	1976 = 13	1976 = 137	1976 = \$27
2001 = \$6,000,000	2001 = 27	2001 = 67	2001 = \$37

1986

Asian clam
(*Potamocorbula amurensis*)

ruffe
(*Gymnocephalus cernuus*)

round goby
(*Neogobius melanostomus*)

zebra mussel
(*Dreissena polymorpha*)

1987

Copepod
(*Pseudodiaptomus forbesi*)

1989

green crab
(*Carcinus maenas*)²

zander
(*Stizostedion lucioperca*)¹

1990

brown mussel
(*Perna perna*)

tubenose goby
(*Proterorhinus marmoratus*)

swamp eel
(*Monopterus albus*)

armored catfish
(*Pterygoplichthys disjunctivus*)

1991

Chinese mitten crab
(*Eriocheir sinensis*)³

1992

Jellyfish
(*Maeotias inexpectata*)

1993

West Indian marsh grass
(*Hymenachne amplexicaulus*)

Mysid shrimp
(*Acanthomysis bowmani*)