
Report for Congress

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Fishery, Aquaculture, and Marine Mammal Online News and Information Sources

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Eugene H. Buck
Senior Analyst in Natural Resources Policy
Resources, Science, and Industry Division

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Summary

A variety of free online sources can be used by Members of Congress and staff seeking current and breaking news on fisheries, aquaculture, and marine mammals. Services identified include newswires and news services, press release services, regional and topical newsletters, topical discussion groups, comprehensive resource archives, professional organizations, trade and interest organizations, government agencies and international commissions, and issue-specific sites. This summary does not attempt a complete listing of available online sources, but offers a selection of frequently used sources. An emphasis of this report is on identifying services which deliver news and information directly to the user by e-mail. This report will be updated periodically to assure that a broad array of useful sources is covered.

Contents

Note: Individual sources are arranged alphabetically within each category, with letter codes following each source's title to identify the source's field of emphasis: G=general, F=fisheries, A=aquaculture, and M=marine mammals.

Introduction	1
Newsires and News Services	2
Aquaculture Newsclips [A]	2
Environment News Service [G]	2
Environmental Media Services [G]	2
Environmental News Network [G]	2
Fish e-News [F]	2
Fish Info Service [A, F]	2
Great Lakes News [G]	3
International Aquaculture WebRing [A, F]	3
IntraFish [A, F]	3
News Index [G]	3
Oceans.Com [F, M]	3
Seafood.Com [A, F]	3
Tidepool [F, M]	3
The Wave [A, F]	3
Whale and Dolphin Conservation Society [M]	4
Whales in Danger News [M]	4
Whaling.Com [M]	4
Press Release Services	4
Animal and Plant Health Inspection Service [M]	4
Atlantic States Marine Fisheries Commission [F]	4
Fishnews [A, F, M]	4
Greenpeace [F, M]	5
High North Alliance Web News [M]	5
National Oceanic and Atmospheric Administration/NOAA Fisheries [A, F, M]	5
Regional Fishery Management Councils [F]	5
Sea Grant College Programs [A, F, M]	5
U.S. Fish and Wildlife Service [A, F, M]	5
World Wildlife Fund [F, M]	5
Regional and Topical Newsletters	6
Alaska Report [F]	6
Atlantic CoastWatch [F]	6
Columbia Basin Bulletin [F]	6
Fish Briefs [F]	6
Fishing Information Newsletter [F]	6
FishLink Sublegals [F]	6
Garden State Seafood Association [F]	6
Harmful Algae News [F, M]	7
Heads Up! [F]	7
MPA News [F]	7
NW Fishletter [F]	7
Ocean Update [A, F, M]	7

Pew Oceans Commission [F, M]	7
Regional Fishery Management Councils [F]	7
Seafood Business [A, F]	8
Seafood News [A, F]	8
Water Log [F, M]	8
Whale and Dolphin Conservation Society Newsletter [M]	8
WhaleDesk Bulletin [M]	8
Topical Discussion Groups (Listservs, E-Mail Lists, etc.)	8
Aquaculture [A]	9
AquaNIC [A]	9
CMPAN [F, M]	9
Corals [F]	9
Fishfolk [F]	9
Fish-Science [F]	9
Marine Aquaculture [A]	9
Marine Biology [F, M]	9
Marine Mammals [M]	10
Ocean Law [F]	10
Sea Turtles [F]	10
Seafood [A, F]	10
Comprehensive Resource Archives	10
Aquaculture Clearinghouse [A]	10
Aquanet [A, F]	10
AquaNIC [A]	10
FishBase [F]	10
Fishing for Information [A, F]	10
Gadus Associates [F]	11
International Fishery Law [F, M]	11
Marine Affairs [F, M]	11
MCBI Links to Resources [F]	11
OceanPortal [A, F, M]	11
Syndel [A]	11
World Aquaculture [A]	11
Professional Organizations	11
American Fisheries Society [A, F]	11
American Society of Ichthyologists and Herpetologists [F]	12
European Aquaculture Society [A]	12
International Association for Aquatic Animal Medicine [A, F, M] ...	12
Society for Marine Mammalogy [M]	12
Trade and Interest Organizations	12
The Alliance of Marine Mammal Parks and Aquariums [M]	12
American Zoo and Aquarium Association [A, F, M]	12
International Marine Mammal Association [M]	12
Marine Fish Conservation Network [F]	12
Marine Stewardship Council [F]	13
National Aquaculture Association [A]	13
National Association of State Aquaculture Coordinators [A]	13
National Fisheries Institute [A, F]	13
The Ocean Conservancy [F, M]	13
Ocean Trust [A, F]	13
Seal Conservation Society [M]	13
U.S. Trout Farmers Association [A]	13

World Aquaculture Society [A]	13
Government Agencies and International Commissions	13
Animal and Plant Health Inspection Service [A, M]	13
Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) [F, M]	14
Commission on Ocean Policy [A, F, M]	14
Department of Fisheries and Oceans, Canada [A, F]	14
Inter-American Tropical Tuna Commission [F]	14
International Commission for the Conservation of Atlantic Tunas [F]	14
International Pacific Halibut Commission [F]	14
International Whaling Commission [M]	14
Interstate Fishery Commissions [F]	14
NOAA Fisheries [A, F, M]	14
National Sea Grant Library [A, F, M]	15
North Atlantic Salmon Conservation Organization [F]	15
Northwest Atlantic Fisheries Organization [F]	15
Pacific Salmon Commission [F]	15
United Nations Food and Agriculture Organization [A, F]	15
U.S. Department of Agriculture [A]	15
U.S. Department of State [A, F, M]	15
U.S. Fish and Wildlife Service [F]	15
U.S. Food and Drug Administration [A, F]	15
Issue-Specific Sites	15
Aquatic Nuisance Species [F]	16
Coral Reefs [F]	16
Hazard Analysis and Critical Control Point (HACCP) [F]	16
Marine Protected Areas [F, M]	16
Conclusion	16

Fishery, Aquaculture, and Marine Mammal Online News and Information Sources

Introduction

Many fishery, aquaculture, and marine mammal issues of interest to Congress evolve rapidly. Free news and information services currently available online or by e-mail permit Members of Congress and their staff to obtain the latest information on these issues. The number and variety of online sites is increasing, providing many new and useful information resources for Congress. This document presents a selection of sources that are readily available for obtaining the latest news. In some cases, examples are given to illustrate the type of service available. Information sources, including web sites, can be highly variable with regard to accuracy, objectivity, and expertise.

Several different types of resources are presented in this summary:

- *Newswires and news services* provide current news, with some focused specifically on fisheries.
- *Press release services* distribute special notices and announcements produced by agencies and organizations.
- *Regional and topical newsletters* periodically update information from the perspective of specific organizations or interests.
- *Topical discussion groups* provide a way of contacting a large number of individuals with varying expertise working in a particular subject area.
- *Comprehensive resource archives* are sites providing links to a multitude of related topics and issues.
- *Professional organizations* are sites providing information from the perspective of recognized professional expertise in the identified field.
- *Trade and interest organizations* include sites created by associations and non-governmental organizations to express their concerns and views.
- *Government agencies and international commissions* include sites of major U.S. regulatory agencies as well as selected international entities.
- *Issue-specific sites* are those that focus specifically on one well-defined area of interest.

Individual sources are arranged alphabetically within each category, with letter codes following each source's title to identify the source's field of emphasis: G=general, F=fisheries, A=aquaculture, and M=marine mammals. While some of these services require the user to visit a specific website, the emphasis of this report is on identifying services which can deliver news and information directly to the user by e-mail.

Newsires and News Services

Commercial newsires and specialized news services are periodically updated to provide current news. Several services have been developed with a specific focus on fisheries. Others may focus on news relevant to a geographic area (*e.g.*, the Great Lakes) or on environmental issues generally. Some news sites, operated by commercial enterprises, may present information reflecting their unique perspectives.

Aquaculture Newsclips [A]. This collection of recent news items relating to aquaculture is compiled by a Canadian citizen and distributed daily by e-mail. Regular receipt of this information can be requested by sending an e-mail message to Dave Conley at dave.conley@sympatico.ca requesting to be added to the distribution list for Aquaculture Newsclips.

Environment News Service [G]. Independently owned and operated, and with no affiliation with any business, industry, government, or environmental group, the Environment News Service (ENS) offers a daily e-mail listing current summaries on a broad range of breaking environmental news. To receive this service, go to the bottom of the left column on the ENS site at [<http://ens-news.com/>] and enter your e-mail address in the box identified by the prompt “Subscribe to ENS.”

Environmental Media Services [G]. Based in Washington, DC, the non-profit Environmental Media Services seeks to provide journalists with the most current information on environmental issues. News items can be found at [<http://www.ems.org/news.html>]. A periodic update on stories, press conferences, and other environmental news can be obtained by e-mail by registering at [<http://www.ems.org/updates.html>].

Environmental News Network [G]. Toward its objective of trying to “present information from all sides,” this organization provides a daily newsletter summarizing recent events and a collection of press releases from affiliated environmental non-governmental organizations. To subscribe, visit the site at [<http://www.enn.com/index.asp>] and place your e-mail address in the box near the top, middle of the page between “newsletter” and “submit.”

Fish e-News [F]. Produced and distributed by *National Fisherman* magazine, a selection of news of interest to the commercial fishing industry is posted on a website at [<http://www.nationalfisherman.com/news/index.asp>]. From a box in the left column on this page, one can enter a name and e-mail address to request receipt of a weekly newsletter of commercial fishing industry news highlights by e-mail.

Fish Info Service [A, F]. A Japanese-based information resource reporting on fishery, processing, and aquaculture industries world-wide, Fish Info Service offers a broad range of international news that is frequently updated at [<http://www.fis.com/fis/worldnews/>]. Although news headlines and brief stories are available on this site, access to the full text of news items requires a paid subscription.

Great Lakes News [G]. A product of the Great Lakes Commission, a binational (United States and Canada) agency promoting the development, use, and conservation of water and related natural resources, the Great Lakes Information Network offers a broad range of news related to the Great Lakes. This updated news can be read online at [<http://www.great-lakes.net/news/>] or received daily by e-mail. To receive this service, address an e-mail message to majordomo@great-lakes.net with “subscribe dailynews” (without the quotation marks) in the body of the message.

International Aquaculture WebRing [A, F]. A selection of international news relating to fish and seafood can be reached by clicking on “Hot News” toward the bottom of a subject list appearing at the left side of the webpage at [<http://www.aquaculture-com.net/aquaculture/webring/>]. The identity of the group or organization maintaining this site is not indicated.

IntraFish [A, F]. This Norwegian news service for the international marine farming industry posts regularly updated news relating to fisheries and aquaculture on its website at [<http://www.intrafish.com/>].

News Index [G]. Produced by an independent company not affiliated with any media organization, News Index provides access to more than 300 regional, national, and international newspapers that are full-text searchable by user-defined subject terms at [<http://www.newsindex.com/>].

Oceans.Com [F, M]. Produced by “The Ocean Channel,” this website provides news and video relating to various oceans issues. Current news is available by clicking on “ocean news” at the top right on [<http://www.ocean.com>].

Seafood.Com [A, F]. Organized by Seafood Datasearch and Urner Barry Publications, this seafood industry exchange and market information service provides current news at [<http://news.seafoodnet.com/>]. Although news headlines and brief stories are available on this site, access to the full text of news items requires a paid subscription. Daily “Seafood.com News Headlines” can be received by e-mail upon submitting an e-mail address in the box at the bottom of the page at [<http://seafood.com/news/index.html>].

Tidepool [F, M]. Prepared and distributed by Ecotrust, a nonprofit organization dedicated to supporting the emergence of a conservation economy along North America’s rain forest coast, Tidepool has several topical foci on recent news related to salmon
[<http://www.tidepool.org/subjects/id.artshow.cfm?category=salmon>],
invasive species
[http://www.tidepool.org/subjects/id.artshow.cfm?category=invasive_species],
and oceans (including marine mammals)
[<http://www.tidepool.org/subjects/id.artshow.cfm?category=ocean>]. Tidepool news can also be received by e-mail upon entering your e-mail address in the box labeled “Tidepool by e-mail” halfway down the right column of [<http://www.tidepool.org/>].

The Wave [A, F]. An online seafood auction and industry information resource created by the global seafood industry and managed by IntraFish Media (see

IntraFish, above), The Wave provides a selection of current domestic and international news headlines relevant to commercial fisheries at [<http://www.thewaveonline.com/>]. Access to the full text of news items requires a paid subscription.

Whale and Dolphin Conservation Society [M]. This active charity, dedicated to the conservation and welfare of all whales, dolphins and porpoises, provides “latest news” on a webpage at [<http://www.wdcs.org/dan/news.nsf/frontpage?readform>].

Whales in Danger News [M]. Operated by an Australian individual, this site provides a summary of recent news on whales and their management. Individual news items can be viewed at [<http://groups.yahoo.com/group/world-altnews-net/>]. To receive these news items by e-mail, send a blank e-mail message to world-altnews-net-subscribe@yahoogroups.com.

Whaling.Com [M]. Operated by Worldnews.Com, an independent multilingual news portal on the Internet, a collection of timely news stories related to whales is regularly updated at [<http://whaling.com/>]. To receive news by e-mail, place your e-mail address in the box labeled “get news updates by email” near the upper right corner of the webpage.

Press Release Services

Press release services distribute special notices and announcements prepared by agencies and organizations. These services are usually operated by the agency or organization for disseminating information to the media.

Animal and Plant Health Inspection Service [M]. Occasional press releases from the U.S. Department of Agriculture’s Animal and Plant Health Inspection Service deal with marine mammals. These press releases can be viewed at [<http://www.aphis.usda.gov/lpa/news/press.html>].¹

Atlantic States Marine Fisheries Commission [F]. One of three U.S. interstate fishery commissions, the Atlantic States Marine Fisheries Commission provides press releases by e-mail. These can be obtained by sending an e-mail message to Tina Berger at tberger@asmfc.org with a request to be put on the Commission’s list to receive periodic press releases.

Fishnews [A, F, M]. Prepared and distributed by the National Oceanic and Atmospheric Administration (NOAA), Fishnews distributes announcements by e-mail of management initiatives and published *Federal Register* items. To receive this service, follow the instructions at [<http://www.nmfs.noaa.gov/fishnews.htm>].

¹Although you can obtain directions on this website to sign-up for delivery of these press releases by e-mail, the small number of items dealing with marine mammals may make it more convenient to visit the website and scan the list of press releases for relevant items.

Greenpeace [F, M]. Access to marine-related press releases prepared by the environmental organization Greenpeace can be found on the webpage at [http://www.greenpeace.org/press/index?campaign_id=3939].

High North Alliance Web News [M]. The High North Alliance provides periodic releases about Arctic marine mammals and whaling from the Norwegian perspective of defending the right of coastal communities to use marine mammals sustainably. To receive this information, follow the instructions at [<http://www.highnorth.no/news/siste.asp>].

National Oceanic and Atmospheric Administration/NOAA Fisheries [A, F, M]. Periodic agency press releases for this U.S. government agency within the Department of Commerce can be viewed at [<http://www.publicaffairs.noaa.gov/releases2003/>].

Regional Fishery Management Councils [F]. Regional fishery management councils, created under the authority of the Magnuson-Stevens Fishery Conservation and Management Act, have a variety of ways for disseminating information to their constituents. The Gulf of Mexico Fishery Management Council operates a read-only listserv to distribute press releases by e-mail. Individuals who would like to receive the Council's press releases by e-mail should send a blank message to pressreleases@gulfcouncil.org with "subscribe" as the subject. Other Regional Councils post their press releases on their webpages but do not distribute them by e-mail. Press releases and informational updates may be viewed for several of the other Councils by visiting: New England Council (click on "News & Motions" in the left column at [<http://www.nefmc.org/index.htm>]), Mid-Atlantic Council [<http://www.mafmc.org/mid-atlantic/press/press.htm>], Caribbean Council [http://www.caribbeanfmc.com/whats_new.htm], Pacific Council [<http://www.pcouncil.org/whatsnew.html>], and Western Pacific Council (see "News and Updates" in the left column at [<http://www.wpcouncil.org>]).

Sea Grant College Programs [A, F, M]. Individual Sea Grant college programs have numerous mechanisms for distributing information to interested parties. One can arrange to receive news releases, for example, from the Minnesota Sea Grant Program by e-mail by requesting such from Marie Zhuikov at mzhuikov@d.umn.edu. Although similar service is not available from all Sea Grant college programs, individuals may receive press releases by e-mail from the National Sea Grant College Program by filling out a form found at [<http://www.seagrantnews.org/press/subscribe.html>].

U.S. Fish and Wildlife Service [A, F, M]. A national "fws-news" read-only listserv provides the latest news releases, bulletins, and other information issued by the U.S. Fish and Wildlife Service, Department of the Interior. To subscribe, send an e-mail to fws-news-request@lists.fws.gov, placing "subscribe" in the subject line of your message. Information on subscribing to news from several FWS regions can be obtained at the bottom of [<http://news.fws.gov/listser.html>].

World Wildlife Fund [F, M]. A collection of recent news related to the World Wildlife Fund's "Endangered Seas Campaign" can be viewed at

[http://www.panda.org/about_wwf/what_we_do/marine/news/index.cfm].

Regional and Topical Newsletters

Regional and topical newsletters periodically update information from the perspective of specific organizations or interests. These services may review recent news from a stated perspective or on a specific issue.

Alaska Report [F]. Promoted as an information hub for Alaska’s commercial fishermen, this service focuses on news and resources for the Alaska commercial fishing industry. News stories are posted at [<http://www.alaskareport.com/>].

Atlantic CoastWatch [F]. Produced by the Sustainable Development Institute, this bi-monthly newsletter discusses a variety of coastal issues. To subscribe, send a blank message to atlanticcoastwatch-distr-subscribe@igc.topica.com. “News nugget” stories from the previous week related to coastal issues are also available on the website at [<http://www.atlanticcoastwatch.org/>].

Columbia Basin Bulletin [F]. Produced by Intermountain Communications of Bend, Oregon, and supported with Bonneville Power Administration fish and wildlife funds through the Northwest Power Planning Council's Columbia Basin Fish and Wildlife Program, the weekly Columbia Basin Bulletin provides news about Basin fish and wildlife issues. An e-mail subscription can be initiated by entering one’s e-mail address in the box at [<http://www.cbbulletin.com/subscribe.htm>].

Fish Briefs [F]. Prepared and distributed every two months by the American Oceans Campaign, a charitable organization, with support from the Connecticut Sea Grant Program, Fish Briefs is a plain-language summary of the latest scientific papers about fish with a focus on their interactions with habitat. To receive Fish Briefs by e-mail, fill out the form provided at [<http://www.americanoceans.org/ucando/fbemail.htm>].

Fishing Information Newsletter [F]. Prepared and distributed by the U.S. Internal Revenue Service’s New England District Office in Bangor, Maine, this monthly newsletter provides timely information to assist the fishing industry with federal tax laws. An e-mail subscription may be obtained by sending a request to fishing.assistance@irs.gov.

FishLink Sublegals [F]. Sponsored and maintained by the Institute for Fisheries Resources and the Pacific Coast Federation of Fishermen’s Associations, FishLink Sublegals is a weekly fisheries information and news service focusing primarily on fisheries habitat conservation and restoration information throughout North America (including Canada), the North Pacific and North Atlantic. A free e-mail subscription to Sublegals may be requested by sending an e-mail to sublegals@ifrfish.org.

Garden State Seafood Association [F]. A weekly newsletter distributed by the Garden State Seafood Association, summarizing items of interest to the New

Jersey commercial fishing industry, can be obtained by requesting such in an e-mail message addressed to Nils Stolpe at njsha@voicenet.com.

Harmful Algae News [F, M]. Prepared and distributed by the Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific, and Cultural Organization (UNESCO), the Harmful Algae News is available by e-mail subscription by clicking on the box labeled “Subscribe Here! Order” on a website at [<http://ioc.unesco.org/hab/news.htm>].

Heads Up! [F]. A collaborative project of Oregon Sea Grant and the Women’s Coalition for Pacific Fisheries, the Heads Up! website [<http://www.heads-up.net/>] provides recent news items and other material of interest to the West Coast fishing industry.

MPA News [F]. Published monthly by the non-profit Marine Affairs Research and Education in association with the University of Washington’s School of Marine Affairs, the MPA News is a monthly newsletter summarizing information about marine protected areas. To receive each issue of MPA News by e-mail as soon as it is published, send an e-mail message to mpanews@u.washington.edu with “subscribe” on the subject line and including your name, mailing address, and daytime phone number in the text of the message. Also, state in the message that you would like your subscription delivered electronically.

NW Fishletter [F]. Produced irregularly by Energy NewsData, an independent provider of energy industry information, the NW Fishletter focuses on management, restoration, and recovery of Pacific Northwest salmon. To be notified by e-mail when each NW Fishletter is published online, send an e-mail message to webmaster@newsdata.com with “Subscribe NW Fishletter” in the subject line and your name and e-mail address in the body of the message. The latest issue of NW Fishletter can be viewed at [<http://www.newsdata.com/enernet/fishletter/>].

Ocean Update [A, F, M]. Produced by SeaWeb, a Washington, DC, project designed to raise awareness of the world ocean and the life within it, this newsletter covers a broad array of current oceans issues. An e-mail subscription can be obtained by entering one’s name and e-mail address in a box labeled “Ocean Update via email” found midway down the right side of the webpage at [<http://www.seaweb.org/home.shtml>].

Pew Oceans Commission [F, M]. A monthly e-newsletter on the activities and interests of the Pew Oceans Commission is distributed by e-mail and can be obtained by typing your e-mail address in a box on the right side of the webpage at [<http://www.pewoceans.org>].

Regional Fishery Management Councils [F]. Many of the Regional Fishery Management Councils, created under the authority of the Magnuson-Stevens Fishery Conservation and Management Act, post copies of their regular newsletters on the Internet. Newsletters can be viewed for the Mid-Atlantic Council [<http://www.mafmc.org/mid-atlantic/publications/pubs.htm#newsletters>], Gulf of Mexico Council [<http://www.gulfcouncil.org/newslet.htm>], Pacific Council (click on

the “newsletters” heading in the left column on [<http://www.pcouncil.org/>], and North Pacific Council [<http://www.fakr.noaa.gov/npfmc/Newsletters/newsltr.htm>].

Seafood Business [A, F]. A copy of the current month’s issue of this publication can be viewed at [<http://www.seafoodbusiness.com/issue.html>].

Seafood News [A, F]. Links to a various news sources of interest to the seafood industry are provided by the Sea Grant Extension Program of the University of California, Davis at [<http://seafood.ucdavis.edu/pubs/onlinenews.htm>].

Water Log [F, M]. Written by the Mississippi-Alabama Sea Grant Legal Program and posted online at [<http://www.olemiss.edu/orgs/SGLC/waterlog.html>], Water Log provides a collection of fishery regulations and judicial decisions. By clicking on “Subscribe or get E-mail Notification of New Water Log Web Postings” on this webpage, individuals can fill out a form to receive e-mail notification when a new issue of Water Log is posted on the website.

Whale and Dolphin Conservation Society Newsletter [M]. Dedicated to the conservation and welfare of all whales, dolphins and porpoises, the Whale and Dolphin Conservation Society, a charitable organization, offers a newsletter, with a subscription available by placing one’s e-mail address in a box labeled “WDCS newsletter” part-way down the right column of the webpage at [<http://www.wdcs.org/>].

WhaleDesk Bulletin [M]. Sponsored by the Australian “Whales in Danger” Information Service, this bulletin focuses on issues relating to the protection of whales and dolphins. One can subscribe to this group’s monthly bulletin, delivered by e-mail, by entering an e-mail address in the box labeled “Subscribe to WhaleDesk” at [<http://whales.netfirms.com/whaledesk/index.html>].

Topical Discussion Groups (Listservs, E-Mail Lists, etc.)

Topical discussion groups provide a convenient way for contacting experts working in particular subject areas who might be able to answer technical or complex questions.² These discussion groups may be created by anyone; the groups listed below are primarily organized and maintained by academic institutions. Many of these groups maintain archives of past discussions, which can be very useful in tracking evolving issues. These groups are typically not refereed, there are usually no restrictions on who may subscribe and participate, and the information in

²Since discussion groups cover a wide range of subjects from varied perspectives, one may wish to subscribe to a group only long enough to ask a question and receive responses. The number of responses one might receive depends on the group and the question. Although responses posted to these groups probably reflect the biases of respondents, those biases occasionally may not be readily discernible from the response or the respondent’s affiliations and could, at times, be misleading. Upon subscription to a group, you will receive an e-mail with instructions describing how to “unsubscribe” from the group when you want to stop receiving e-mail messages distributed to that group and how to receive messages in a compiled “digest format” rather than individually.

responses should not be presumed accurate or documented. These groups provide an array of commentary from different people and/or organizations with specific, and sometimes biased, perspectives on particular issues, regardless of experience or expertise. One can search for discussion groups on other or more specific topics at [<http://www.lsoft.com/catalist.html>] or browse lists at [http://www.atc.stir.ac.uk/Fishing/Marine/M_disc.htm].

Aquaculture [A]. This group, owned by the Aquaculture Association of Canada, discusses the science, technology, and business of rearing aquatic species. To subscribe, send an e-mail message to majordomo@killick.mi.mun.ca with the one-line message “subscribe aqua-L”.

AquaNIC [A]. An interactive website where the aquaculture community shares ideas and thoughts on current issues related to aquaculture, discussion, organized by various species and aquaculture systems, is posted at [<http://ag.ansc.purdue.edu/discuss/index.htm>] rather than distributed by e-mail.

CMPAN [F, M]. Administered by the California Sea Grant Extension Service, the California Marine Protected Areas Network (CMPAN) is a discussion group that facilitates information exchange about marine protected areas (*e.g.*, national parks, national marine sanctuaries, marine refuges, marine reserves, ecological preserves). To subscribe, send a message to listproc@ucdavis.edu with “subscribe cmpan” in the message text.

Corals [F]. This international e-mail discussion forum focuses on corals and coral reef health. To subscribe, place an e-mail address in the box labeled “Coral List Server” in the left column at [<http://www.coral.noaa.gov/lists/>] and click on the box below labeled “subscribe.”

Fishfolk [F]. This group hosts a discussion and information exchange on various aspects of fishery economics, sociology, policy, and management. To subscribe, send an e-mail message to listserv@mitvma.mit.edu with the one-line message “subscribe fishfolk (yourfirstname) (yourlastname)”.

Fish-Science [F]. This group is an international e-mail forum for the discussion of scientific ideas and events pertaining to fish and fisheries. To subscribe, send an e-mail message to listserv@seagate.sunet.se with the one-line message “subscribe fish-sci (yourfirstname) (yourlastname)”.

Marine Aquaculture [A]. This group hosts a discussion and information exchange on various aspects of marine aquaculture. To subscribe, send an e-mail message to listserv@mitvma.mit.edu with the text “subscribe oceanf-L (yourfirstname) (yourlastname)”.

Marine Biology [F, M]. This discussion includes all issues of interest to marine scientists internationally. To subscribe, send an e-mail message to majordomo@mote.org with the one-line message “subscribe marbio”.

Marine Mammals [M]. This group hosts a discussion and information exchange on various aspects of marine mammal biology, conservation, and management. To subscribe, send an e-mail message to listserv@uvvm.uvic.ca with the one-line message “subscribe marmam (yourfirstname) (yourlastname)”.

Ocean Law [F]. This group focuses on international fisheries and related Law of the Sea issues. To subscribe, send an e-mail message to jiscmail@jiscmail.ac.uk with the one-line message “join oceanlaw (yourfirstname) (yourlastname)”.

Sea Turtles [F]. This group hosts a discussion and information exchange on various aspects of sea turtle biology and conservation. To subscribe, send an e-mail message to listserv@lists.ufl.edu with the one-line message “subscribe cturtle (yourfirstname) (yourlastname)”.

Seafood [A, F]. This group hosts a discussion and information exchange on varied aspects of seafood technology and safety. To subscribe, address your request to listproc@ucdavis.edu. In the body of your message, type “subscribe seafood (yourfirstname) (yourlastname)”.

Comprehensive Resource Archives

The World Wide Web is rapidly becoming a comprehensive archive for topical information. Many resource archives exist that provide links to large volumes of information on a given subject. The sites identified in this category contain a multitude of links to other online resources for fishery, aquaculture, and marine mammal information, and could provide a useful starting point for research.

Aquaculture Clearinghouse [A]. Operated by SeaWeb, an independent ocean information and communications organization, the Aquaculture Clearinghouse [<http://www.seaweb.org/resources/sac/>] focuses on growing issues of aquaculture in North America and its sustainable development. This website’s purpose is to create awareness about the environmental and social issues related to aquaculture.

Aquanet [A, F]. The Aquatic Network [<http://www.aquanet.com/>], operated by Seacoast Information Services, Inc., provides a diverse collection of services, databases, news, editorials, art forms, advertisements, and products.

AquaNIC [A]. Supported by the U.S. Department of Agriculture and the National Sea Grant College Program, AquaNIC [<http://www.aquanic.org/>] provides a central website for finding information about U.S. aquaculture.

FishBase [F]. A global information system claiming to provide “all you ever wanted to know about fishes” and practically all known fish species, FishBase [<http://www.fishbase.org/home.htm>] is a relational database with biological information for research scientists, fisheries managers, zoologists and others.

Fishing for Information [A, F]. Supported by the British consulting firm Stirling Aquaculture, the Fishing for Information site at

[<http://www.stir.ac.uk/Departments/NaturalSciences/Aquaculture/fishing/default.htm>] provides a broad collection of Internet resources in aquatic science with particular emphasis on aquaculture and fisheries.

Gadus Associates [F]. Maintained by a Canadian fishery science consulting company, this site [<http://pages.istar.ca/~gadus/links.html>] provides a collection of links to more than 2,500 websites containing information on marine commercial fisheries, fisheries science and fisheries management.

International Fishery Law [F, M]. Maintained by an individual as a non-profit and non-commercial venture, this site [<http://www.oceanlaw.net/>] provides a comprehensive resource center for information on international fishery law and management. The site has a collection of international agreements and other documents relating to international fisheries, information on international fishery organizations, a glossary of fisheries terms, and a large collection of links to other sites.

Marine Affairs [F, M]. Compiled by a professor at the University of Rhode Island's Department of Marine Affairs, this website [<http://www.uri.edu/cels/maf/wwwlinks.htm>] provides a multitude of links to relevant marine affairs programs and institutions.

MCBI Links to Resources [F]. The Marine Conservation Biology Institute (MCBI) provides a large list of websites for international marine-related institutions and programs at [<http://www.mcbi.org/Resources/Resources.htm>].

OceanPortal [A, F, M]. Managed by the Intergovernmental Oceanographic Commission (IOC) of the United Nations Educational, Scientific, and Cultural Organization (UNESCO), the OceanPortal website at [<http://oceanportal.org/>] provides an extensive list of websites covering all categories of ocean resources and issues.

Syndel [A]. Managed by a private Canadian company, the website at [<http://www.syndel.com/links.html>] provides links to a multitude of websites of relevant to the aquaculture industry.

World Aquaculture [A]. Created by two private individuals, the website at [<http://www.newmex.com/platinum/data/index2.html>] was designed to present an extensive, dynamic database of information pertaining to aquaculture.

Professional Organizations

Members of many professions have formed associations or societies for people who share professional interests. Some of those related to aquaculture, fisheries, and marine mammals have websites providing a variety of resources.

American Fisheries Society [A, F]. The oldest and largest professional society representing fisheries scientists, the American Fisheries Society has a website at [<http://www.fisheries.org/>].

American Society of Ichthyologists and Herpetologists [F]. Dedicated to the scientific study of fishes, amphibians and reptiles, the American Society of Ichthyologists and Herpetologists has a website at [<http://199.245.200.110/>].

European Aquaculture Society [A]. Seeking to be the European forum for contacts and information exchange among all segments of the aquaculture industry, the European Aquaculture Society has a website at [<http://www.easonline.org/home/en/default.asp>].

International Association for Aquatic Animal Medicine [A, F, M]. As an organization of individuals who are professionally interested in and devote a significant amount of time to the practice of aquatic animal medicine, teaching and research in aquatic animal medicine, or the husbandry and management of aquatic animals, the International Association for Aquatic Animal Medicine has a website at [<http://www.iaaam.org/>].

Society for Marine Mammalogy [M]. With a membership of professionals in natural science or the management, husbandry, conservation, or training of marine mammals, the Society for Marine Mammalogy has a website at [<http://www.marinemammalogy.org/>].

Trade and Interest Organizations

Trade associations exist for various segments of commercial business associated with aquaculture, fisheries, and marine mammals.

The Alliance of Marine Mammal Parks and Aquariums [M]. An international association of marine life parks, aquariums, zoos, research facilities, and professional organizations, the Alliance has a website at [<http://ammpa.org/>], relating to care for marine mammals and their conservation in the wild.

American Zoo and Aquarium Association [A, F, M]. Representing virtually every professionally operated zoological park, aquarium, oceanarium, and wildlife park in North America, the American Zoo and Aquarium Association has a website at [<http://www.aza.org/>].

International Marine Mammal Association [M]. Dedicated to the conservation of marine mammals and their habitats worldwide, through research and education, this group operates a website at [<http://www.imma.org/>].

Marine Fish Conservation Network [F]. A coalition of more than 100 national and regional environmental organizations, commercial and recreational fishing groups, and marine science groups dedicated to conserving marine fisheries and to promoting their long-term sustainability, the Marine Fish Conservation Network manages a website at [<http://www.conservefish.org/site/frames.html>] providing information on current issues.

Marine Stewardship Council [F]. A global charitable organization with its international headquarters in London, England, the Marine Stewardship Council provides information on marine conservation and sustainable fisheries on its website at [<http://www.msc.org/>].

National Aquaculture Association [A]. Working to represent all segments of the U.S. aquaculture community at a national level, the National Aquaculture Association has a website at [<http://www.natlaquaculture.org/>].

National Association of State Aquaculture Coordinators [A]. This group has a website at [<http://www.ncagr.com/aquacult/NASAC.html>] providing state contacts and information.

National Fisheries Institute [A, F]. Representing a wide spectrum of firms from small, family owned businesses to large multinational corporations in commercial fisheries and aquaculture, the National Fisheries Institute has a website at [<http://www.nfi.org/>].

The Ocean Conservancy [F, M]. Committed to protecting ocean environments and conserving the global abundance and diversity of marine life, The Ocean Conservancy (formerly the Center for Marine Conservation) has a website at [<http://www.oceanconservancy.org/>].

Ocean Trust [A, F]. An ocean conservation foundation, Ocean Trust provides information relating to sustainable use of the ocean on their website at [<http://www.oceantrust.org/>].

Seal Conservation Society [M]. The Seal Conservation Society (United Kingdom) provides selected pinniped-related information from various international sources on a website at [<http://www.pinnipeds.org/main.htm>].

U.S. Trout Farmers Association [A]. Organized by a group of trout farmers interested in creating a strong, unified voice for the national trout industry, the U.S. Trout Farmers Association has a website at [<http://www.ustfa.org/>].

World Aquaculture Society [A]. With the objective of improving communication and information exchange within the diverse global aquaculture community, the World Aquaculture Society operates a website at [<http://www.was.org/main/FrameMain.asp>].

Government Agencies and International Commissions

Most of the U.S. government agencies dealing with aquaculture, fisheries, and marine mammals have established websites. In addition, foreign governments, international commissions, and the United Nations Food and Agriculture Organization also have websites.

Animal and Plant Health Inspection Service [A, M]. Within the U.S. Department of Agriculture, the Animal and Plant Health Inspection Service (APHIS)

provides leadership in ensuring the health and care of animals and plants as well as improving agricultural (including aquacultural) productivity and competitiveness. The agency maintains a website at [<http://www.aphis.usda.gov/>].

Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) [F, M]. This international body hosts a website focusing on Antarctic marine resources at [<http://www.ccamlr.org/pu/e/gen-intro.htm>].

Commission on Ocean Policy [A, F, M]. Created by Congress, the U.S. Commission on Ocean Policy is required to establish findings and make recommendations to the President and Congress for a coordinated and comprehensive national ocean policy in 2003. The website at [<http://oceancommission.gov/>] provides documents on policy discussions and options.

Department of Fisheries and Oceans, Canada [A, F]. Working to provide safe, healthy, productive waters and aquatic ecosystems, Canada's Department of Fisheries and Oceans (DFO) has a website at [http://www.dfo-mpo.gc.ca/home-accueil_e.htm].

Inter-American Tropical Tuna Commission [F]. Responsible for the conservation and management of fisheries for tunas and other species taken by tuna-fishing vessels in the eastern Pacific Ocean, the Inter-American Tropical Tuna Commission (IATTC) has a website at [<http://www.iattc.org/HomeENG.htm>].

International Commission for the Conservation of Atlantic Tunas [F]. With responsibility for the conservation of tunas and tuna-like species in the Atlantic Ocean and its adjacent seas, the International Commission for the Conservation of Atlantic Tunas (ICCAT) has a website at [<http://www.iccat.es/>].

International Pacific Halibut Commission [F]. Created to study and preserve the stocks of Pacific halibut within the territorial waters of the United States and Canada, the International Pacific Halibut Commission (IPHC) has a website at [<http://www.iphc.washington.edu/halcom/default.htm>].

International Whaling Commission [M]. Created to provide for the proper conservation of whale stocks and thus make possible the orderly development of the whaling industry, the International Whaling Commission operates a website at [<http://www.iwcoffice.org/>].

Interstate Fishery Commissions [F]. Created to cooperatively manage interjurisdictional fisheries among coastal states, the Atlantic States [<http://www.asmf.org/>], Gulf States [<http://www.gsmfc.org/>], and Pacific States [<http://www.psmfc.org/>] Marine Fishery Commissions each operate their own website.

NOAA Fisheries [A, F, M]. Located within the National Oceanic and Atmospheric Administration in the Department of Commerce to manage marine living resources under federal jurisdiction, NOAA Fisheries (formerly the National Marine Fisheries Service) has a website at [<http://www.nmfs.noaa.gov/>].

National Sea Grant Library [A, F, M]. Created as an archive and lending library for publications arising from the wide variety of marine and coastal research funded by the Sea Grant Program, the National Sea Grant Library operates a website at [<http://www.nsgd.gso.uri.edu/>].

North Atlantic Salmon Conservation Organization [F]. Established to promote the conservation, restoration, and enhancement of salmon stocks in the North Atlantic Ocean through international cooperation, the North Atlantic Salmon Conservation Organization (NASCO) operates a website at [<http://www.nasco.org.uk/>].

Northwest Atlantic Fisheries Organization [F]. Created as an international forum to address problems affecting the fisheries of the Northwest Atlantic, the Northwest Atlantic Fisheries Organization (NAFO) operates a website at [<http://www.nafo.ca/index.html>].

Pacific Salmon Commission [F]. Created by the United States and Canada to promote the conservation, rational management, and optimum production of Pacific salmon, the Pacific Salmon Commission (PSC) has a website at [<http://www.psc.org/Index.htm>].

United Nations Food and Agriculture Organization [A, F]. International fisheries management issues and concerns are highlighted on the United Nations Food and Agriculture (FAO) website at [http://www.fao.org/fi/nems/news/Fisheries_news.asp?lang=en].

U.S. Department of Agriculture [A]. Aquaculture activities by various agencies within the U.S. Department of Agriculture (USDA) are highlighted at [<http://www.nal.usda.gov/afsic/afsaqua.htm>].

U.S. Department of State [A, F, M]. Within the U.S. Department of State, the Bureau of Oceans and International Environmental and Scientific Affairs (OES) has a website at [<http://www.state.gov/g/oes/>].

U.S. Fish and Wildlife Service [F]. Within the U.S. Fish and Wildlife Service (FWS), information on fishery programs is available on a website at [<http://fisheries.fws.gov/>].

U.S. Food and Drug Administration [A, F]. The U.S. Food and Drug Administration (FDA) administers programs related to assuring the safety of the U.S. food supply. Issues related to fish can be found at the website at [<http://vm.cfsan.fda.gov/seafood1.html>].

Issue-Specific Sites

A host of websites deal with specific issues. A few examples of such resources on current issues are included in this section, although some specific issues already are included in material identified in previous sections.

Aquatic Nuisance Species [F]. The U.S. Aquatic Nuisance Species Task Force manages a website at [<http://www.anstaskforce.gov/>] focusing on aquatic invasive species. This Task Force and other U.S. government agencies also operate a website at [<http://www.protectyourwaters.net/>] that provides additional resources on this issue.

Coral Reefs [F]. The U.S. Coral Reef Task Force manages a website at [<http://coralreef.gov/>] that focuses on coral reef protection and management.

Hazard Analysis and Critical Control Point (HACCP) [F]. The regulatory system of hazard control, applicable to fish and seafood, designed to identify hazards, establish controls, and monitor those controls, as implemented in the United States, is explained and discussed at [<http://www-seafood.ucdavis.edu/haccp/ucd.htm>].

Marine Protected Areas [F, M]. Created jointly by the U.S. Department of Commerce and the U.S. Department of the Interior, the website at [<http://www.mpa.gov/>] provides a broad range of material on this approach to managing marine resources.

Conclusion

Used singly or in combination, these sources may help provide a current awareness of breaking news as well as expert assistance relevant to fisheries, aquaculture, and marine mammal issues.