



Vessel Fishing History Requests: How They Work

The New England and Mid-Atlantic Fishery Management Councils have developed or are considering management measures for several fisheries that rely in part on the fishing history of your vessel.

Here, we will explain how you can request and review the fishing history for your vessel and detail what steps you might need to take to review the fishing history of a vessel that you did not own for the entirety of its history or that you do not currently own if, for example, you are considering buying a vessel.

What data are used to determine my landings history?

Dealer purchase reports are the primary source of information about the species and pounds landed for each fishing trip. Vessel Trip Reports (VTRs) are the primary source of information about your fishing trip, such as fishing area and gear used, even for fisheries that use other reporting systems such as a Vessel Monitoring System (VMS). We combine your VTR information with the landings data submitted by dealers to determine where your landings were harvested.

Why is it important to know your vessel's fishing history?

Your fishing history may be used to qualify you for a permit in a new fishery or for an allocation of fishing privileges within an existing fishery. For example, the program that established limited-access Atlantic herring permits in 2007 required landings data to show that the vessel landed a specified amount of Atlantic herring during a specified period of time.

Who owns a vessel's fishing history?

Unless a vessel owner specifies otherwise, a vessel fishing history transfers with the vessel whenever it is bought, sold, or transferred. However, when a vessel is sold by an owner to a buyer, the limited-access eligibilities and fishing history can be retained by the previous owner through the bill of sale or other written document signed by both the seller and buyer.

The previous owner then can put these eligibilities and fishing history onto another vessel or preserve them through a "Confirmation of Permit History," or CPH, to place them on another vessel in the future.

In the case of a vessel sale, if the seller does not document the retention of the vessel's fishing history and limited-access eligibilities, they are transferred to the new owner along with the vessel hull. This means that we must receive and review all of the documents associated with a vessel sale to determine which owner holds the limited-access eligibilities and fishing history.

In addition, fishery management actions implemented over the past 20 years have included measures to allow a vessel owner to transfer a vessel's limited-access eligibilities and fishing history to another vessel through a process called a vessel replacement.

For example, when Vessel A is replaced by Vessel B, the limited-access eligibilities and all fishing history from Vessel A transfer to Vessel B.

So, to determine the complete fishing history of a vessel, it is necessary to compile information about its limited-access permit eligibilities and fishing history, including all vessel replacements, ownership changes, and retentions.

This research may reveal that there were multiple owners of a vessel who submitted fishing information in the past. If that's the case, authorization must be obtained from each of the previous owners to provide the data to a requestor.

Who can request and receive a vessel's fishing history?

Landings information is considered confidential under section 402(b)(1) of the Magnuson-Stevens Fishery Conservation and Management Act.

Generally, this information may only be released to the person who submitted the information to NOAA Fisheries. If you are the current owner of a vessel, you may request a fishing history that summarizes all of the information submitted during the period of time you owned the vessel. This would include data submitted in your VTRs and data contained in dealer reports of purchases made from your vessel.

If you are requesting the vessel's fishing history before the date you owned it, you will need to submit

(or already have on file) a written authorization from the previous owner to obtain the information for the period they owned the vessel.

This authorization may be granted in a bill of sale or through a separate signed statement from the previous owner granting you access to catch or landings records. The owner of a vessel also may submit an authorization that will allow NOAA Fisheries to provide a summary of their vessel's data to any individual, such as an attorney or a prospective buyer. An optional authorization form is available upon request.

How can I access historic data for my vessel?

The fastest and easiest way to see your recent landings information is to use Fish-On-Line, which can be accessed through the Northeast Regional Office's website at www.nero.noaa.gov/NMFSlogin/login/login.

Fish On-line is a secure, web-based site that allows you to view, print, and save the most recent 12 months of vessel trip reports and dealer purchase reports submitted for your vessel.

If you have owned your vessel for less than 12 months, you will only be able to access records for the period of time you have owned the vessel. You must obtain a PIN number to access Fish On-Line. To obtain a PIN, please call us at (978) 281-9133.

See VESSEL HISTORY, page 4

There's Still Time to Apply for a Limited-Access Mackerel Permit

Vessel owners may submit applications for a limited-access mackerel permit until Feb. 28, 2013. Applications postmarked after this date will not be considered. You can get an application packet and guide online at www.nero.noaa.gov or by calling the Northeast Region Permit Office at (978) 282-8438.

If you are issued a Tier 1 or Tier 2 limited-access mackerel permit, the deadline has been extended by one year to submit a vessel hold capacity measurement to NOAA Fisheries.

You must submit verification that your hold capacity measurement was completed by an "approved individual or entity" in writing by Dec. 31, 2013 or at the first vessel replacement after qualifying for a Tier 1 or Tier 2 permit, whichever is sooner.

If you do not submit a verified vessel hold capacity measurement by Dec. 31, 2013, you will not be eligible to renew your limited-access mackerel permit for the 2014 permit year, which starts

on April 1, 2014.

Approved individuals or entities include: an individual credentialed as a certified marine surveyor with a fishing specialty by the National Association of Marine Surveyors (NAMS); an individual credentialed as an accredited marine surveyor with a fishing specialty by the Society of Accredited Marine Surveyors (SAMS); employees or agents of a classification society approved by the Coast Guard pursuant to 46 U.S.C. 3316(c); the Maine State Sealer of Weights and Measures; a professionally-licensed and/or registered marine engineer; or a naval architect with a professional engineer license.

Open-access permits

As a reminder, the current possession limit for the open-access mackerel permit is 20,000 pounds per trip or calendar day. Vessel owners do not need to apply for a limited-access Atlantic mackerel permit in order to retain or renew their open-access mackerel permit.

For more information about limited-access program requirements or the permit application, call the Northeast Region Permit Office at (978) 282-8438. For further information about possession limits or other mackerel fishery restrictions, call the Northeast Region Sustainable Fisheries Division at (978) 281-9315.



DAS Leasing and ACE Trading Under Sector Management

On May 1, 2010, sector management expanded, resulting in changes to the groundfish industry. All limited-access Northeast multispecies (groundfish) permits are eligible to join a sector.

Sectors are allocated quotas called annual catch entitlements, or “ACEs,” of 14 stocks that are granted exemptions from many effort controls, including possession limits and the requirement to use a day-at-sea (DAS) to land groundfish.

In exchange, the sectors take on the responsibility of managing their fishing strategies, monitoring their catches, and ensuring that their quotas are not exceeded.

In fishing year 2010, 52% of the limited-access groundfish permits joined a sector. In 2011, sector membership increased to 56% and again increased in 2012 to 60%.

Starting this year, state-operated permit banks also receive an allocation of groundfish based on the permits they hold. The state-operated permit banks then make that amount available to sector members.

DAS trading

The expansion of sector management has changed the DAS leasing market and created a new ACE trading market. Common pool vessels continue to be allocated

groundfish DAS to manage their landings of groundfish stocks. Sector vessels are allocated groundfish DAS, but only need to use those DAS to satisfy requirements of other fishery management plans for species like monkfish and skate.

Since sector DAS are not used as the basis for controlling groundfish catch, sector vessels and common pool vessels cannot lease groundfish DAS to each other. As a result, there are now two DAS leasing markets – one for sectors and another for the common pool.

DAS leasing information for 2010, 2011, and 2012 are very different and show that the groundfish industry is still in transition. The DAS leasing markets likely will become more consistent as the industry gets more comfortable with running a business under the new rules.

DAS leasing costs are reported on the application by industry members. A portion of the lease cost data in Table 2 shows leases that were made among vessels

belonging to a single company and, so, may skew DAS lease prices.

Sectors may trade ACE allocations, and this has resulted in a robust new market. During 2010, every sector traded ACE to another sector, and all but one sector leased ACE.

In 2011, the number of trades and the amount of ACE traded increased slightly. Data for 2012 are not yet complete, but indicate a very active market.

NOAA Fisheries Service has started collecting data on compensation for ACE trades. Most often, ACE is traded for cash, but quota also is frequently traded for other quota or other goods and services.

We estimate that, in 2010, the value of the ACE trading market was \$13.5 million, though we did not have value information for all trades.

In general, the DAS and ACE markets show that the groundfish industry has a very fluid movement of allocations. This is critical to the fishery’s success as opportunities to harvest fish move to vessels that will use those opportunities.

Ultimately, the success of the fishery depends on the balance of income and costs, including the increased income of landing additional fish as well as increased costs of leasing DAS or trading ACE.

As the fishery adapts to operating under the new sector management system, we can expect the DAS and ACE markets to remain highly fluid but also to stabilize so that costs do not fluctuate as much throughout the year. Along with this, we expect to see a higher proportion of groundfish quotas landed each year.

Examining the DAS leasing market and the ACE trading market is just one way to look at how the groundfish industry is changing. Other factors, like the percentage of annual catch limits that are landed, provide additional information about how the fishery is operating under sectors.

For more information, contact Mark Grant, NOAA Fisheries Office of Sustainable Development, at (978) 281-9145 or e-mail him at <mark.grant@noaa.gov>.

Table 1: Membership, Allocation, and Landings of Sectors and the Common Pool

	LIMITED-ACCESS MULTISPECIES FISHERY	Permits Enrolled		Allocation		Landings	
		Number	Percentage*	Pounds	Percentage*	Pounds	Percentage*
2010	Sectors	761	52%	179,350,461	98%	65,926,081	97%
	Common Pool	714	48%	3,278,272	2%	1,729,497	3%
2011	Sectors	828	56%	161,784,451	99%	108,916,856	99%
	Common Pool	647	44%	1,880,118	1%	647,164	1%
2012	Sectors	851	60%	156,373,680	99%	2012 Landings are not yet available	
	Common Pool	558	40%	1,515,440	1%		

*Percentages are of the total number of limited-access permits, total of stocks allocated to the commercial groundfish fishery, and total commercial groundfish landings.

Table 2: DAS Leasing Activity of Sectors and the Common Pool

GROUNDFISH DAS LEASING ACTIVITY	Sectors		Common Pool	
	2010	2012*	2010	2012*
Total Leases Processed:	197	143	33	8
Total Leases Approved:	153	108	27	8
Number of Distinct Permits:	212	156	30	9
Total DAS Transferred:	4,174	3,557	333	102
Average cost per DAS Transferred:	\$143	\$10	\$175	\$133
Highest cost per DAS Transferred:	\$1,000	\$75	\$290	\$200
Lowest cost per DAS Transferred:	\$0	\$0	\$0	\$8

* Data for 2012 is for May 1 through November 9

Table 3: ACE Trading Activity Among Sectors

YEAR	NUMBER OF TRADES†	POUNDS TRADED
2010	1,073	16,349,038
2011	1,345	17,339,371
2012*	760	17,567,051

†Number of trades includes each stock in trades involving multiple stocks. For example, a trade involving five stocks is counted as five trades.

* Data for 2012 is for May 1 through November 9

Cooperative Research NE Networks Generating Fisheries Innovations

In the fall of 2010, the NOAA Fisheries Northeast Cooperative Research Program (NCRP) awarded more than \$3 million to a number of network groups to help them tackle difficult challenges in New England and Mid-Atlantic fisheries.

These network projects support fishing industry, academic, non-governmental, and state and federal government partners that are developing multi-disciplinary approaches to minimizing the catch of non-target species (or bycatch) while promoting the harvest of target species.

More than 80 individuals from 35 organizations have organized into project teams that are working to develop more selective fishing gear, researching patterns of fish distribution and environmental factors, and facilitating the real-time exchange of information to identify bycatch "hot spots."

Additionally, some teams are exploring innovative survey methods to enhance stock assessments for selected species. Along with scientists and state and federal managers, project participants include fishermen and gear manufacturers who provide ideas, at-sea expertise, and practical guidance on the projects.

Northeast projects

- **GEARNET** – The Gear Conservation Engineering and Demonstration Network known as GEARNET is led by the Gulf of Maine Research Institute (GMRI), Massachusetts Division of Marine Fisheries (DMF), University of Massachusetts Dartmouth School for Marine Science and Technology (SMAST), Superior Trawl, F/V Guardian, and New Hampshire Sea Grant.

The network is conducting gear-related research, helping to transfer new technologies to the fishing industry to limit bycatch of non-target species in order to more fully harvest allocated species, and identifying ways to reduce fishing costs.

To date, initial projects have focused on: topless flatfish trawls; raised-footrope gillnets and gillnet selectivity; the use of electric rod and reel to target haddock; expanded use of haddock trawls; improving fuel efficiency; and sponsoring a flume tank workshop for trawl gear fishermen and others to help them gain an in-depth understanding of gear design and operation.

GEARNET scientists also are working in conjunction with Coastal Enterprises Inc. of Maine to provide opportunities for fishermen to finance the purchase of semi-pelagic doors, fuel-flow meters, and acoustic trawl monitoring equipment to increase vessel fuel efficiency and decrease the impact of trawl gear on fishing habitat.

GEARNET is seeking additional and/or expanded project ideas through the end of December. More information about this network and how to submit project proposals can be found online at <www.gearnnet.org>.

- **FAST** – The Fishing Area Selectivity Tool (FAST) project is led by a team from GMRI's Fisheries Technical Assistance Program and Ocean Data Products with help from industry advisors.

The project is piloting a versatile online tool for fishermen to map and track their encounters with specific species in order to identify bycatch "hotspots" so fishermen can avoid them.

The FAST tool is being developed to produce maps that combine historical observer information, oceanographic data layers such as temperatures and currents, and near real-time, self-reported fishery data in a format that fishermen can use.

After discussions with industry groups, the team has decided the pilot FAST project will be focused on how this tool can be used to reduce gillnet interactions with harbor porpoise in the Gulf of Maine.

For this pilot project, groups of fishermen have agreed to share among themselves when and where they encounter harbor porpoise. The tool includes an alert system that will notify the participating fleet when a take has been self-reported. By logging into the web-based portal, fishermen can compare their own real-time information with historic interactions, as well as potentially related oceanographic information. Sharing this information in real-time will enable fishermen to better avoid these animals.

The pilot FAST project has been presented to the Harbor Porpoise Take Reduction Team for additional input and feedback from interested parties. In the future, the FAST tool could enable groups of fishermen to focus on any species of interest to reduce bycatch and/or to more efficiently harvest target species.

- **CCCHFA** – The Cape Cod Commercial Hook Fishermen's Association (CCCHFA) is coordinating groundfish-based network project. Working with Duke University and the Georges Bank Fixed-Gear Sector the project is investigating ways to increase the efficient use of fishing allocations by reducing bycatch and damage to catch from scavengers such as hagfish, spiny dogfish, and fleas.

This project analyzed Northeast Fisheries Observer Program information on catch and discards from 36 gillnet vessels for patterns in time and space to support the use of options such as "move-on" strategies.

Identifying bycatch and/or catch damage patterns

can help determine the distance away from a high bycatch or damage location fishermen must move or the number of hours or days they must wait until the factors that influence the pattern have changed. One example is determining how long it takes for a school of dogfish to move out of an area or how far away fishermen must move to reduce the chances of encountering the school.

Such information can benefit fishermen by helping them make strategic decisions that can maximize revenues by limiting bycatch and/or damaged catch and benefit the fishery resource by minimizing the bycatch of juveniles and non-target species, especially stocks of concern.

This method also may be useful to minimize interactions with protected species, such as harbor porpoise and sturgeon. The results of this analysis are being reviewed for broader applicability in fixed-gear fisheries and vetted through CCCHFA for practical utility.

- **REDNET** – This network group is working to redevelop a sustainable Acadian redfish trawl fishery in the Gulf of Maine. Led by researchers from DMF, SMAST, and the Maine Department of Marine Resources, and working with industry and management partners, this project has conducted experimental fishing trips designed to show the industry's ability to catch redfish cleanly.

Information from these experimental fishing trips informed a request from the New England Fisheries Management Council for NOAA Fisheries to pursue exemptions allowing sector vessels to more efficiently target redfish.

A new regulatory measure subsequently was proposed in the Federal Register on Nov. 8, 2012 (77 FR 66947) to expand on a previous sector exemption by allowing groundfish sector trawl vessels to harvest redfish using nets with codend mesh as small as 4.5". Public comment on this proposed sector exemption is being accepted through Dec. 31, 2012.

The next component of the REDNET project will investigate codend mesh selectivity work, which will be used in the evaluation of the proposed mesh size exemption for unwanted impacts on other groundfish species and/or juvenile redfish.

This research will test several codend mesh sizes between 4.5" and 6.5" to determine the selectivity of each mesh size. Additional work on bycatch reduction for the redfish fishery may be conducted if the need arises. Marketing research on redfish also has been completed and public outreach is being developed as part of the REDNET project.

You can read about our SNE/Mid-Atlantic networked projects in the next edition of the NOAA Navigator.

For more information on any of these projects contact Carolyn Woodhead by e-mail at <carolyn.woodhead@noaa.gov> or by phone at (978) 281-9197.

Offshore Mussel Farming Offers New Opportunities for Fishermen

As traditional fishing practices are changing, some fishermen are looking to aquaculture as a means to supplement their commercial fishing income.

To support these efforts, NOAA Fisheries' Aquaculture Office funded a proposal from Salem State University in 2012 to examine the permitting process for mussel culture in federal waters.

This environmentally sustainable project has the potential to increase the supply of domestic mussels, keep the working waterfront viable, and provide jobs.

Salem State researchers Dr. Mark Fregeau and Ted Maney have been working with local fishermen on a successful experimental inshore mussel

project for the last five years.

Now, they are working to obtain permission from the US Army Corps of Engineers, in consultation with several other federal agencies, to start an offshore mussel farm in New England waters.

"By working through the permitting process and deploying a long-line system, we hope to show that offshore mussel farming is practical and complementary to more traditional fishing activities," said Dr. Fregeau.

Once the necessary permits are in place, the permitted area will be used as a training ground for local fishermen in Massachusetts who are interested in exploring the possibility of growing mussels themselves.

If participating fishermen decide to start their own

farms, the project researchers will help them obtain the necessary permits. This kind of aquaculture venture will allow fishermen to use their own fishing boats, sell to buyers they already work with, and keep working on the water as independent operators.

There is extensive opportunity in the domestic market for mussels. In the first six months of 2011, the US imported 14,000 metric tons (30,864,717 pounds) of mussels. The majority of this product was frozen and came from New Zealand and Chile. US domestic production currently remains below 2,000 metric tons (4,409,245 pounds).

For more information about this project, contact David Alves, NOAA Aquaculture Program, by phone at (978) 281-9210 or e-mail him at <david.alves@noaa.gov>.

Federal HMS Dealer Reporting Goes Electronic

Beginning Jan. 1, 2013, all dealer reports for Atlantic highly migratory species (HMS) must be submitted electronically. HMS covered by this requirement are Atlantic swordfish, sharks, and the BAYS tuna complex, which is comprised of bigeye, albacore, yellowfin, and skipjack tunas. Bluefin tuna will continue to be reported using the current system of faxed landing cards.

The shift to electronic reporting for most HMS will provide more timely data for use in monitoring landings of these quota-managed species.

In most cases, electronic reporting of HMS has been incorporated into electronic reporting systems that are already being used by Northeast dealers, so the adjustment should be relatively simple.

You can figure out how these new regulations will affect you by finding the heading below that describes the way you currently report purchases of HMS to NOAA Fisheries.

You currently report your HMS purchases electronically through the Standard Atlantic Fisheries Information System (SAFIS) or Trip Tickets (i.e., Bluefin Tuna Data Inc. Trip Ticket Software System).

The changes will be relatively minor. In SAFIS, you already may have noticed that several new data fields are available when you report purchases of HMS.

Among other things, these include total sale price, areas where HMS are caught, and explanations for late reporting and modified data. Beginning on Jan. 1, the new SAFIS data elements will be mandatory.

In Trip Tickets, the new mandatory data fields will be visible at the start of the New Year.

You currently report your HMS purchases using file upload from proprietary software.

You can continue to use file upload for the bulk of your reporting. However, after your files are uploaded, you will need to go into SAFIS and add the required HMS elements if you are reporting any HMS besides bluefin tuna.

If you need to make any changes to a previously submitted report that contains HMS, you also will have to update that report through SAFIS. In the near future, we will be working with dealers using file upload to evaluate whether the file upload process and their software can be modified to accommodate the new HMS elements and, ultimately, simplify this process.

You currently report your HMS purchases using paper documents.

Most likely, you only have a tuna dealer permit from the Northeast Region and/or a swordfish and/or shark permit from the Southeast Region without any other Northeast dealer permits.

You will need to choose an electronic reporting method (i.e., SAFIS, Trip Tickets, or HMS eDealer) and access the necessary hardware and software to use that system.

HMS eDealer allows entry of HMS dealer data only. SAFIS and HMS eDealer can be accessed online via the Internet. The Trip Tickets program needs to be downloaded from the Internet to your local computer and, once downloaded, only needs to access the Internet to transmit

data files. HMS staff can work with you to identify the system that best suits your needs.

Weekly reporting

The other significant change to HMS dealer reporting requirements in the electronic reporting rule, which was published on in the Federal Register on Aug. 8, 2012 (77 FR 47303) is a switch from biweekly to weekly reporting.

Most Northeast dealers already report on a weekly basis. Dealers who hold only an HMS dealer permit (i.e., tuna, shark, or swordfish) without any other Northeast region permits will need to change the frequency of their reports to once a week, beginning on Jan. 1.

Reports for the previous Sunday through Saturday must be submitted by midnight on Tuesday of the following week, which is the current requirement for those reporting through SAFIS.

Dealers also will need to provide the HMS Management Division with a current and valid e-mail address, as official correspondence regarding dealer reporting will be conducted through e-mail.

Northeast Region port agents are well versed in electronic dealer reporting and are able to answer general reporting questions, especially those related to SAFIS.

Vessel history *Continued from page 1*

What if I want data older than the most recent 12 months?

You must submit a written vessel history request to NOAA Fisheries that contains: your name and contact information; vessel name and Federal vessel permit number; time period for the data requested; delivery method (e-mail address or mailing address); and your signature and date. If you only want the information for certain species of fish or shellfish, please note that in your request.

If you are requesting information that was submitted by someone other than yourself, you will need an authorization to receive confidential data. If one is not already on file, please include any such authorizations, such as a bill of sale or authorization signed by the submitter.

Requests can be submitted by any one of the following methods.

- E-mail to <NERO.Data.Requests@noaa.gov>. Please note that e-mail requests must be in the form of a signed, scanned attachment. An e-mail without a signature is not sufficient. Enter the vessel name and permit number in the subject line.
- Fax to (978) 281-9161, Attn: Data Requests. Or,
- Mail to: NOAA Fisheries/APSD, 55 Great Republic Drive, Gloucester, MA 01930, Attn: Data Requests.

If I request my vessel's fishing history, what will I receive as a final product?

The vessel's fishing history is summarized in a spreadsheet documenting all of the reported vessel and dealer landings information over time. If the history comes from activity carried out by more than one fishing vessel, the landings are shown for each vessel over the time period.

The history will include the following information.

The staff of the HMS Management Division can help answer HMS-specific questions and provide access and guidance regarding the different reporting programs for HMS dealers new to electronic reporting.

For more information, call us at (301) 427-8590 or visit our website at <www.nmfs.noaa.gov/sfa/hms/edealer/index.html>. Support for Trip Ticket users is available from Bluefin Data LLC. Call the company at (225) 744-0807 or visit <http://bluefindata.com>.

HMS Management Division

(most eDealer questions)

301/427-8590

Northeast Region Port Agent Offices

(most SAFIS questions)

Portland, ME	207/780-3322
Gloucester, MA	978/281-9338
Chatham, MA	508/945-5961
New Bedford, MA	508/984-0063
Point Judith, RI	401/783-7797
East Hampton, NY	631/324-3569
Toms River, NH	732/818-1311
Cape May, NJ	609/884-2113
Hampton, VA	757/723-3369

- Dealer-reported landings data from dealer purchase reports, which will be compiled by providing vessel permit number, purchase date, dealer number, species name, and pounds purchased.
- Vessel-reported landings data from VTRs, which will be compiled by providing vessel permit number, date sailed, date landed, date sold, VTR serial number, dealer number, species landed, pounds kept, and pounds discarded. And,
- The vessel's ownership history, which will be compiled by providing vessel owner, vessel name, vessel permit number, limited-access permits, permit transfers, and the start/end dates for each vessel contributing to the fishing history.

The most efficient way to receive your vessel's fishing history is by providing an e-mail address with your request. Fishing industry information sent through the US mail will be sent on a CD unless a paper copy is requested. If you require a paper copy, the landings may be summarized by month and species depending on the amount of data resulting from your request.

What should I do if I think there are errors in my landing reports?

If you identify errors in the dealer-reported landings data, please call the Fisheries Data Service Division at (978) 281-9348 and the dealer to resolve the matter.

If you identify errors in the vessel-reported data, please contact the VTR Office at (978) 281-9246.

Where can I get more information?

You can contact the data request team by e-mail at <NERO.Data.Requests@noaa.gov> or by phone at (978) 281-9133.

You also can obtain a fact sheet and optional data request form at <www.nero.noaa.gov/apspd/DataRequestFactSheet.pdf>.



The NOAA FISHERIES NAVIGATOR