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December 5, 2008

Ms. Lori Steele
New England Fishery Management Council
50 Water Street, Mill #2
Newburyport, MA 01950

DEC 05 2008

Re: Herring Amendment 4 Catch Monitoring Program

Dear Ms. Steele:

The Commonwealth of Massachusetts' Division of Marine Fisheries (*Marine Fisheries*) offers the following comments and suggestions in response to the New England Fishery Management Council's (NEFMC) "Call for Stakeholder Recommendations for an Atlantic Herring Fishery Catch Monitoring Program." Our involvement in sea herring management at the NEFMC and Atlantic States Marine Fisheries Commission (ASMFC) and the amount of time we have spent and will continue to spend on our own catch sampling makes the Commonwealth an important stakeholder. Additionally, mid-water trawl vessels (single and paired) that have sparked the public call for improved monitoring are centered in Massachusetts (Gloucester & New Bedford). Moreover, being a member of the NEFMC Sea Herring Committee that will receive stakeholders' recommendations, we feel an early contribution to this discussion is important.

We do not offer every detail for a catch monitoring program. That seems premature since it is the responsibility of the National Marine Fisheries Service (NMFS) to provide the necessary science and statistical analyses relevant to sampling design, methods, and coverage. Furthermore, program costs are to be born by the federal government unless it is decided that the herring fishery must pay for its own coverage. We suspect that option will not be preferred because NMFS observer data reveal that sea herring catch and bycatch are not restricted to only one gear type. Nevertheless, *Marine Fisheries* will commit future time, effort, and resources to work with NMFS, the NEFMC, members of the sea herring industry, and all interested stakeholders to help complete a comprehensive and detailed outline of a catch monitoring program. Furthermore, concomitant to our funding situation, we will make a reasonable attempt to contribute to administering and maintaining such a program.

What follows are some suggestions for Amendment 4 to the Atlantic Herring Fishery Management Plan, program goals and objectives, and program elements. For the latter, we have focused on some of the questions listed in the draft Amendment 4 Discussion Document dated

cc: 12/5/08, LS

September/October 2008. We intend to refine these ideas and recommendations in preparation for the December 16th NEFMC Sea Herring Committee meeting.

Program Rationale

Size Composition & Yield

Determining size composition of herring catch will be an essential element of the program especially because at certain times and places, catch (including Canadian) can be heavily comprised of juvenile herring. The size of that catch can affect yield from the fishery. For example, a lower fishing mortality target and catch level would be required for a fishery with a large percentage of juvenile fish than one dominated by adults. The 9th Stock Assessment Workshop (SAW) in 1989 revealed far less total yield and less resilience to exploitation when juveniles dominate catch. At this time, catch appears to be primarily adults, but that can change in a fishery as dynamic as sea herring.

Bycatch & Discard

Bycatch and discard of other species caught while fishing for sea herring must be monitored and identified by gear-type. While haddock, striped bass, shad and river herring are commonly indicated as "primary" bycatch species, we believe a better understanding of all species caught is warranted.

While mid-water trawls tend to be identified as an important source of river herring bycatch and discard, other gear (i.e., bottom trawls) appears to catch far more river herring than mid-water trawls in some areas and times. NEFSC 2005-07 sea sampling reveals this to be the case from January-March around and southeast of Block Island with sampled catches frequently ranging from 1,000-10,000 pounds of river herring in the latter area (Figure 1). In contrast, mid-water trawls appear to be the most important source of river herring bycatch/discard east of Chatham based on sea sampling results (Figure 2).

Offshore January-March and April-June mid-water trawler bycatch in the mid-Atlantic must be considered in any sampling program because shad, river herring, as well as striped bass and other species, are caught there (Figures 3 & 4). Moreover, during these months and areas observer 2005-07 data indicated "slippage" of full nets (fish released or dumped) due to "non-target" catch (Figure 5).

Another inshore location in need of monitoring is north of Gloucester to off New Hampshire. This nearshore area appears to be a potential October-November "hotspot" for river herring/shad bycatch by mid-water trawlers. We suggest it might be a "hotspot" for bycatch by purse seines as well as bottom trawls targeting sea herring and/or groundfish. The groundfish rolling closure (Area 5) from October-November obliges vessels to fish in a "box" bordered by the western boundary of the Western Gulf of Maine Closed Area, state waters, and a line of latitude just south of Gloucester.

Haddock bycatch cap

The NEFMC already has addressed the haddock bycatch issue through a hard Total Allowable Catch (TAC) and bycatch allocation. However, a haddock TAC becomes meaningless without an accurate catch monitoring program. Even though haddock

bycatch determination should be far easier than for river herring and shad due to haddock's dissimilar color, shape, and size from sea herring, reported estimates of haddock bycatch appear inconsistent and unofficial.

Allowing mid-water trawlers to fish for herring in the groundfish closed areas, especially Closed Area 1 east of the Great South Channel (Figure 6), is a cause of concern to those interested in haddock bycatch and some members of the Council. Special access to fish for haddock in the area was granted to hook fishermen after painstaking efforts on their part. Efforts that seem contrary to the small-mesh fishing with mid-water nets capable of working throughout the water column and potentially on or near the bottom in this area. Hook fishermen witnessing mid-water, small-mesh trawling in the area near hook sets has stirred up anguish, acrimony, and accusations.

Mid-water trawling access to this area and other groundfish closed areas will be incorporated into Amendment 4 to the Atlantic Herring Fishery Management Plan. Observer coverage linked to access will be part of that Amendment, as well as clearer criteria to determine what would lead to loss of access.

Observer coverage

The NMFS Northeast Fisheries Observer Program continues to provide valuable bycatch information, and the Standardized Bycatch Reporting Methodology Amendment (SBRM) is an integral part of bycatch determination. However, observer coverage of directed herring fisheries is too low to adequately assess conditions and manage the fishery. Consequently, some suspect the SBRM needs revision to account for the size and nature of pelagic fisheries, i.e., sea herring as well as mackerel.

Additionally, the occasional "large" catch of species (besides sea herring) challenges the sampling technique and determination of the amount of observer coverage needed to detect that catch.

Landings

Also in question is the procedure to estimate actual catch of sea herring. In 2008 the Management Area 1A quota was reduced to 45,000 metric tons making it more difficult for the ASMFC Sea Herring Section, and ME, NH, and MA in particular, to distribute catch throughout the fishing year to deal with the needs of the herring industry and those relying on herring as a source of bait, such as the lobster fishery.

There have been accusations that herring landings are not tallied accurately, and NMFS should improve its procedure/protocol for recording landings. States have worked with NMFS to identify data gaps and needed improvements, especially timeliness of catch reporting, but more work needs to be done to improve accuracy and to make this landing's data official.

Premise

The small-mesh fishery for sea herring merits special attention and a catch monitoring program independent of programs and coverage for other fisheries.

Rationale: Mid-water trawling by single and paired vessels comprise a substantial portion of the “large-vessel” fleet directing on sea herring. Other reasons for this attention are: size of nets and catch volumes; visibility (e.g., large vessels targeting sea herring near smaller vessels fishing for groundfish and other species); notoriety (justified or not); special access to Groundfish Closed Areas and small-mesh fishing; extreme difficulty of representative sampling of very large catches (e.g., 500,000 pounds) landed in narrow time-windows (e.g., MA/NH/ME Area 1A landing windows) by many vessels; and at-sea processing with catches being sorted at sea far from landing sites.

Catch Monitoring Program Goals & Objectives

- (1) *Create a cost-effective, administratively feasible program for provision of accurate and timely records of catch of all species in the sea herring fishery:*
 - (a) ensure the program is sustainable and not subject to the vagaries of federal and state budgets;
 - (b) review federal notification and reporting requirements for the herring fishery to clarify, streamline, and simplify protocols (see July 29, 2008 letter to vessel owners and dealers); and

- (2) *Develop a program providing catch of herring and bycatch species that will foster support by the herring industry and others concerned about accurate accounts of catch and bycatch, i.e., a well-designed, credible program:*
 - (a) avoid prohibitive and unrealistic demands and requirements for those involved in the fishery, i.e., processors and fishermen using single and paired mid-water trawls, bottom trawls, purse seines, weirs, stop seines, and any other gear capable of directing on sea herring; and
 - (b) improve communication and collaboration with sea herring vessels and processors to promote constructive dialogue, trust, better understanding of bycatch issues, and ways to reduce discard.

- (3) *Design a robust program for decisions triggering management actions:*
 - (a) identify areas and times where and when bycatch and discard are likely to be higher and more frequent;
 - (b) identify bycatch and discard by individual vessels and/or different components of the herring fishery by gear type;
 - (c) address fishing practices and catch handling that may confound adequate accounting of amount and kind of bycatch;
 - (d) supplement the SBRM baseline to account for: (i) increased concern about the status of river herring and some groundfish stocks, and (ii) uncertainty regarding the nature and extent of river herring and groundfish bycatch in the Atlantic sea herring fishery;
 - (e) determine if standard approaches for sampling herring catches provide estimates of bycatch with variances small enough to extrapolate sample results to total catch;
 - (f) review protocol for federal sea sampling to ensure that sea herring are not incorrectly classified as river herring or shad (note: significant mistakes have been made in the past);

- (g) determine the extent to which NMFS cross-checks Interactive Voice Response Reports (IVRs) with Fishing Vessel Trip Reports (VTRs) and reconciles reports with vessel fishing locations monitored through Vessel Monitoring Systems (VMS);
- (h) determine if an increase in the frequency of cross-checking is needed and whether VMS-reported catch locations are accurate;
- (i) evaluate whether 100% observer coverage of all herring vessels fishing in Groundfish Closed Areas is appropriate;
- (j) require a high level and increased frequency of observer coverage and sea sampling of all vessels targeting herring in the fall from the New Hampshire border to Stellwagen Bank and from Provincetown to the Great South Channel;
- (k) account for all landings by species pumped directly from fishing vessels into tanker trucks for transport to processing facilities out of state and in Canada, i.e., a weighmaster program;
- (l) determine if carrier vessels' herring is reported in landings and repair reporting problems that may exist;
- (m) experiment with electronic monitoring to determine its effectiveness in evaluating herring catch and bycatch as well as disposition of tows (e.g., dumped or "slipped");
- (n) accommodate NE Sea Sampling Branch recommendations (nine) for improved catch monitoring (see Amendment 4 Discussion Document page 30); and
- (o) require SAFIS dealer reporting requirements for all sea herring landed.

(4) *Determine if at-sea sampling provides bycatch estimates similar to dockside monitoring estimates:*

- (a) assure sea sampling of at-sea processors' catches is at least equal to shore-side sampling;
- (b) reconcile differences in federal and states' protocols for sea sampling and dockside sampling, and implement consistent dockside protocols to increase sample size and enhance trip sampling resolution.

Funding

State funding for dockside-sampling now occurs through the Atlantic Coastal Cooperative Statistics Program and ASMFC. In Massachusetts partial funding has been provided through a one-year Atlantic Coastal Fisheries Cooperative Management Act (ACFCMA) grant encumbering funds for travel, supplies, and salary for a field coordinator. *Marine Fisheries* has provided some in-kind support by adding samplers based in our New Bedford and Gloucester field stations. If the ACFCMA grant is not renewed funding will end, and a new source will be required.

It is unlikely the Commonwealth will be able to establish a catch monitoring program at-sea or increase dock-side sampling beyond *Marine Fisheries*' efforts this fall to acquire details of catch and bycatch shore-side. The perilous state of the national economy and the Commonwealth's worsening economic outlook preclude any funds to support a regional catch monitoring program through intensified sampling in Massachusetts' ports.

Assuming the federal budget for monitoring will decrease in future years for all fisheries, the only option will be for an industry-funded observer program. We recommend an industry working group to determine the pros and cons of such a system and to develop details for the Council's consideration. You already have listed some key questions/issues in the Amendment 4 discussion document. We assume your request for stakeholder recommendations will provide some insight as to whether developing and implementing an industry-funded program is feasible. We expect 100% observer coverage for access to Groundfish Closed Areas will prompt that discussion, and a working group format might be the next step. *Marine Fisheries* can facilitate that discussion.

One-hundred percent observer coverage (or some other high level) for fishing in other areas will be resisted by mid-water trawlers if the other many fishing trips for herring by vessels with other gear (e.g., purse seiners and bottom trawlers) are not included. Mid-water trawler interests consistently have objected to their being singled out for scrutiny when sea sampling data indicate bycatch is not solely a mid-water trawler problem.

Conclusion

Marine Fisheries will continue to be involved in the development and implementation of an improved catch monitoring program to be adopted through Amendment 4. We all stand to learn a great deal from stakeholders' suggestions and Committee review of those ideas.

However, if NMFS concludes it only will sample trips at a level providing a 20-30% CV, we suspect at-sea sampling will be limited to no more than a very small percentage of all trips (less than 5% for mid-water trawls). An alternative strategy will be necessary. One strategy might involve the industry having to assume a substantial portion of monitoring costs.

We suggest that in your role as Plan Development Team (PDT) chairwoman you insist the NEFMC give the PDT clear and unambiguous guidance as to how to proceed with catch monitoring. *Marine Fisheries'* role will be to provide that guidance and to assist your PDT efforts with continued contributions from our scientific staff.

Sincerely,



Paul J. Diodati
Director

Cc: Commissioner Mary Griffin, MA DFG
Dr. David Pierce, MA DMF
Massachusetts Marine Fisheries Advisory Commission

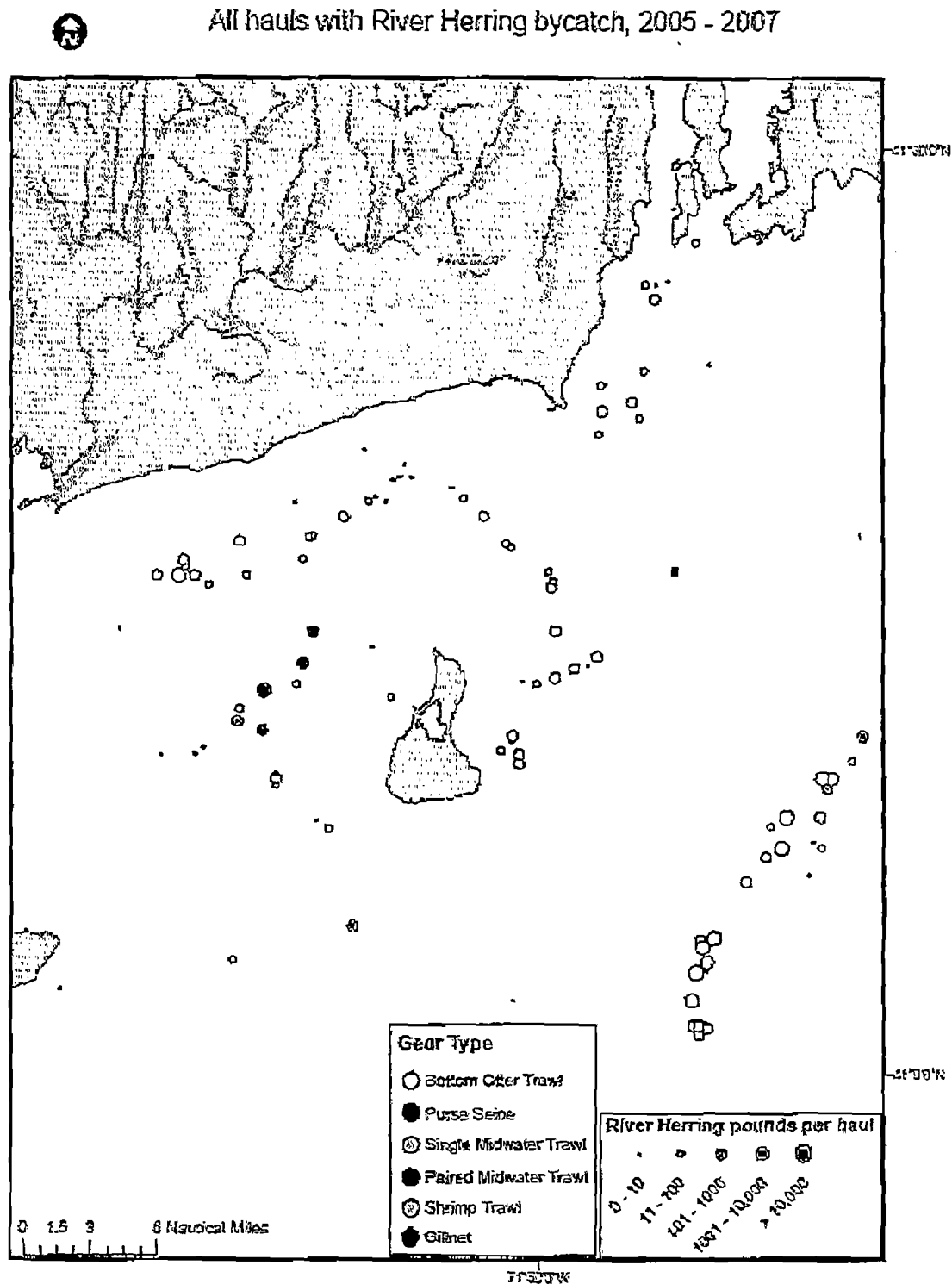


Figure 1

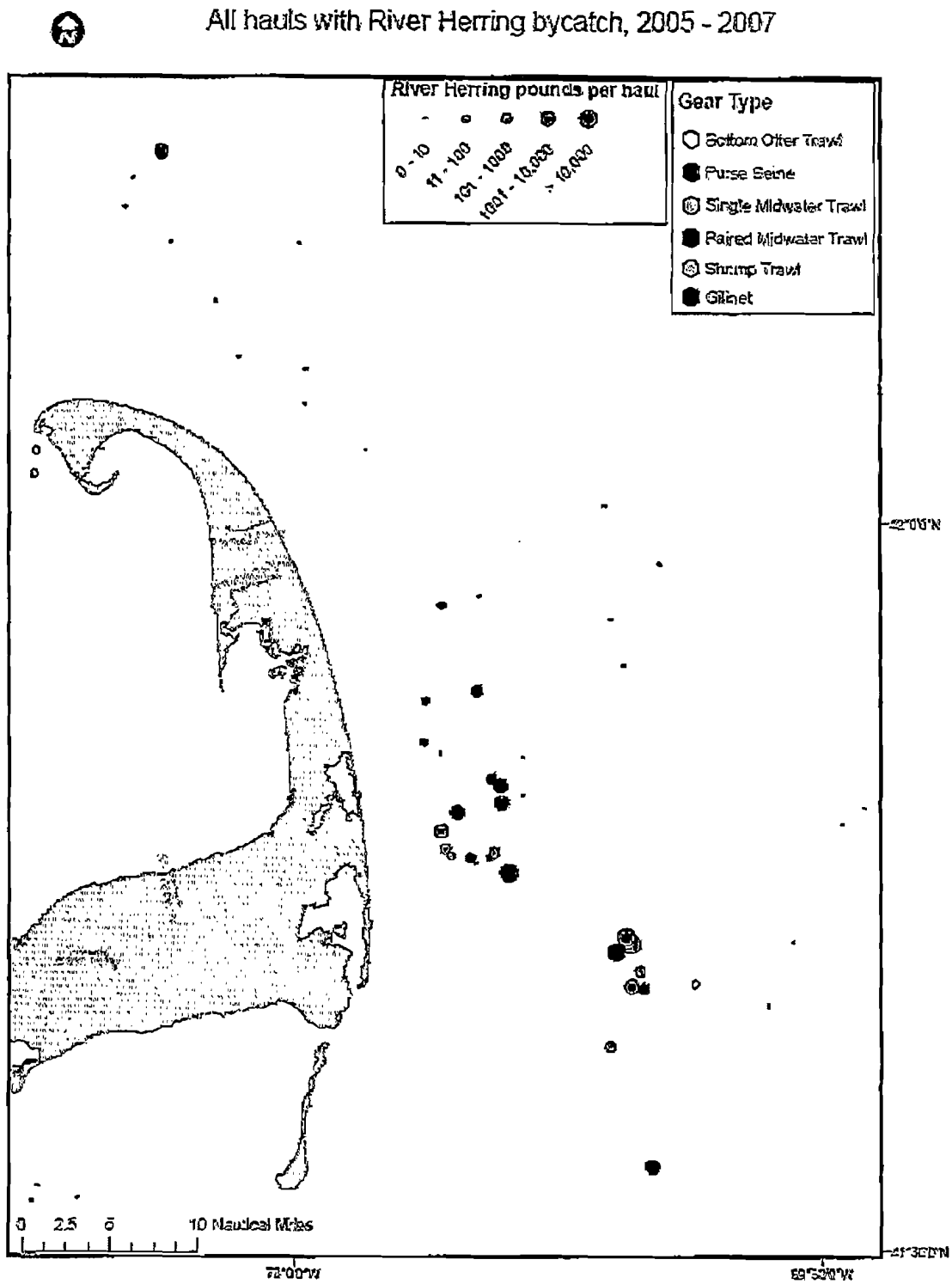


Figure 2

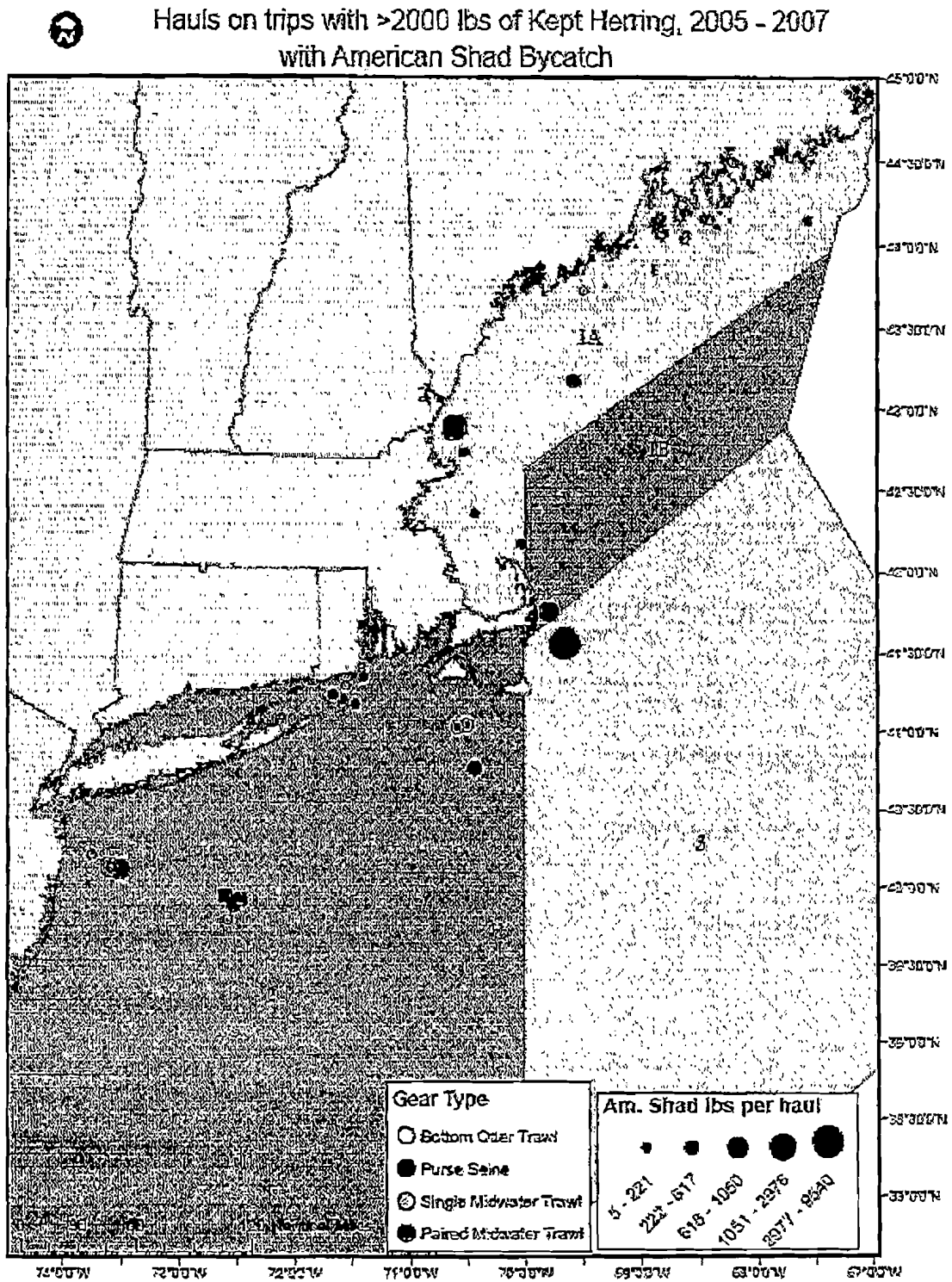


Figure 3

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Hauls on trips with >2000 lbs of Kept Herring, 2005 - 2007 with Striped Bass Bycatch

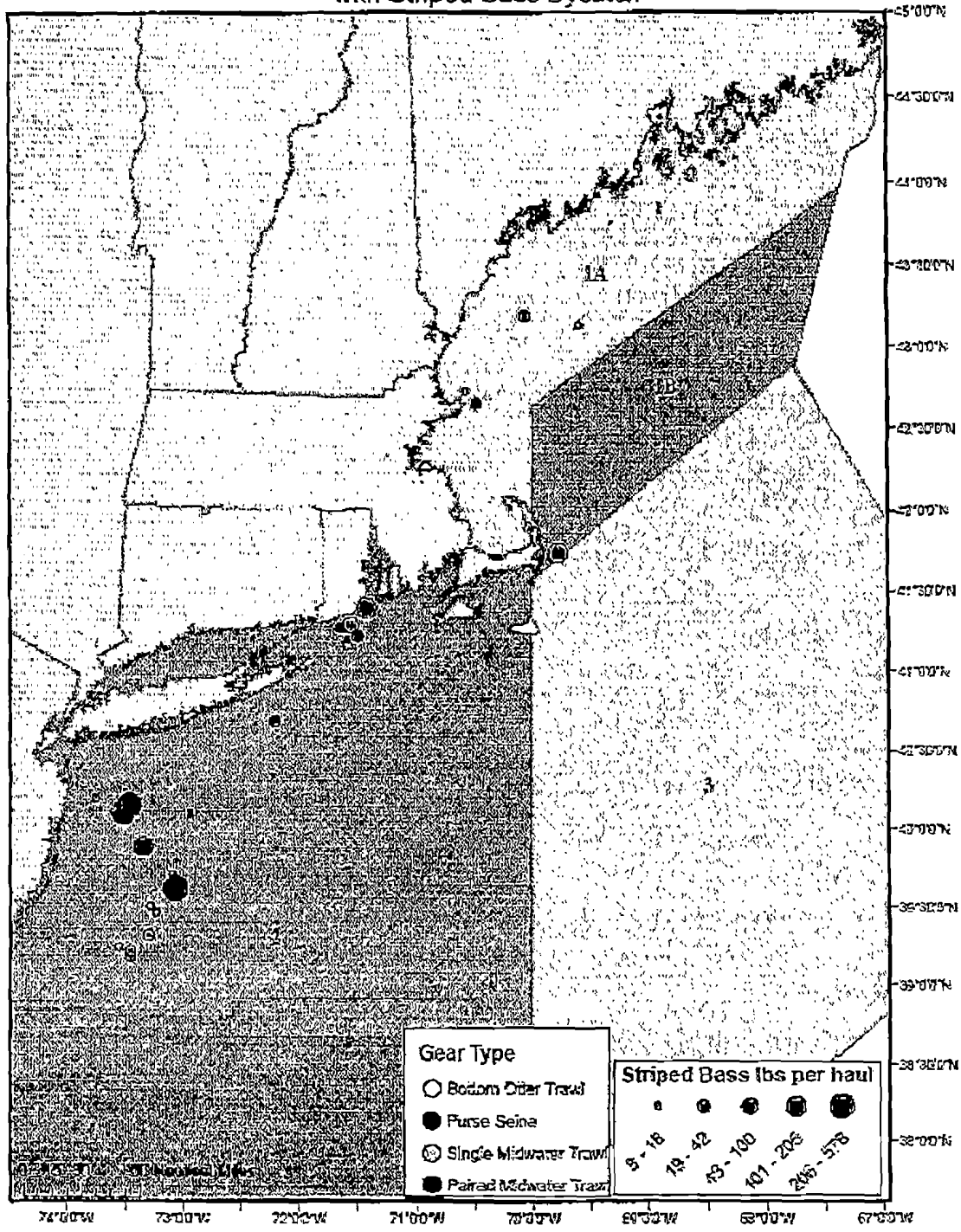


Figure 4

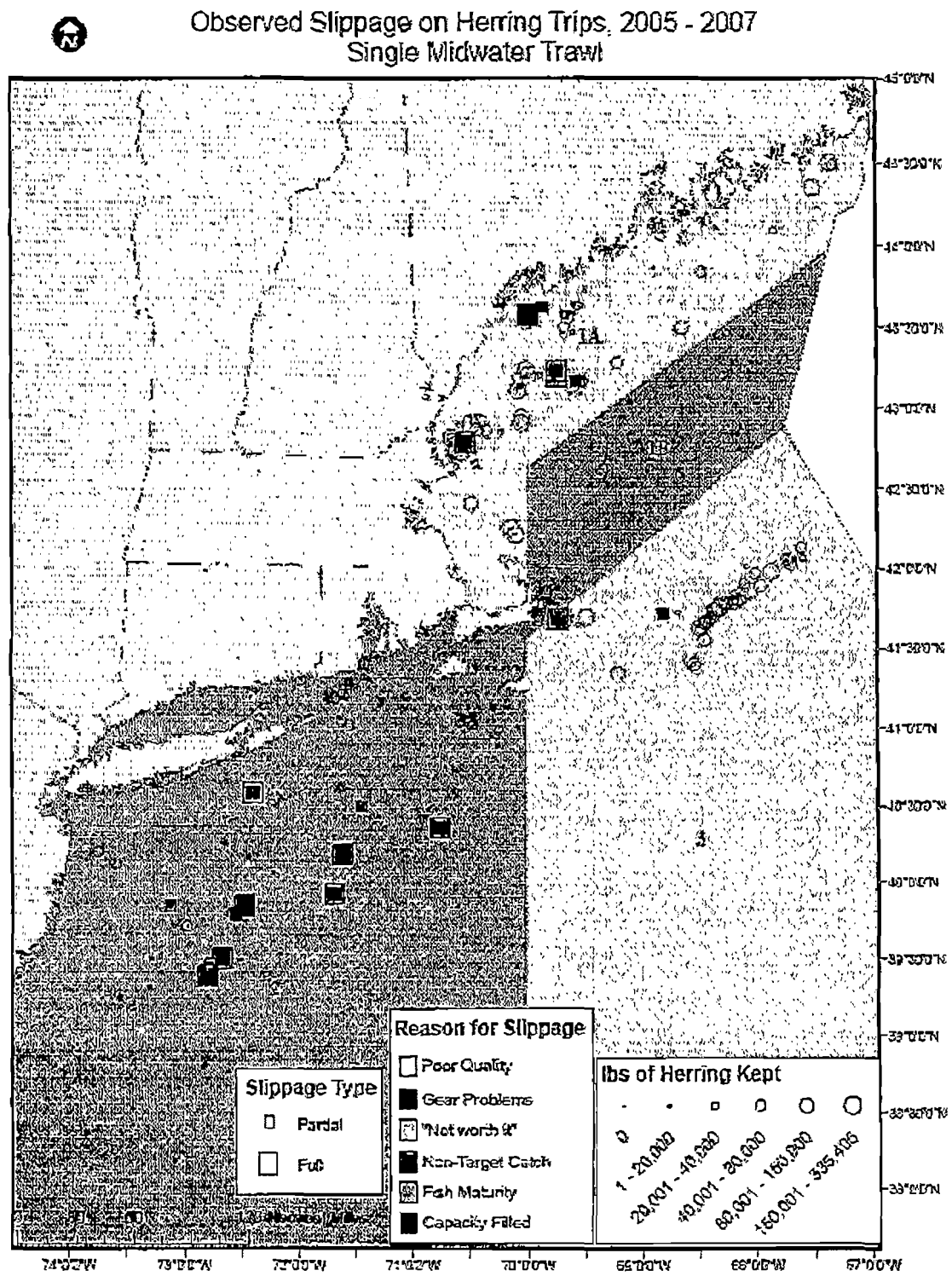


Figure 5

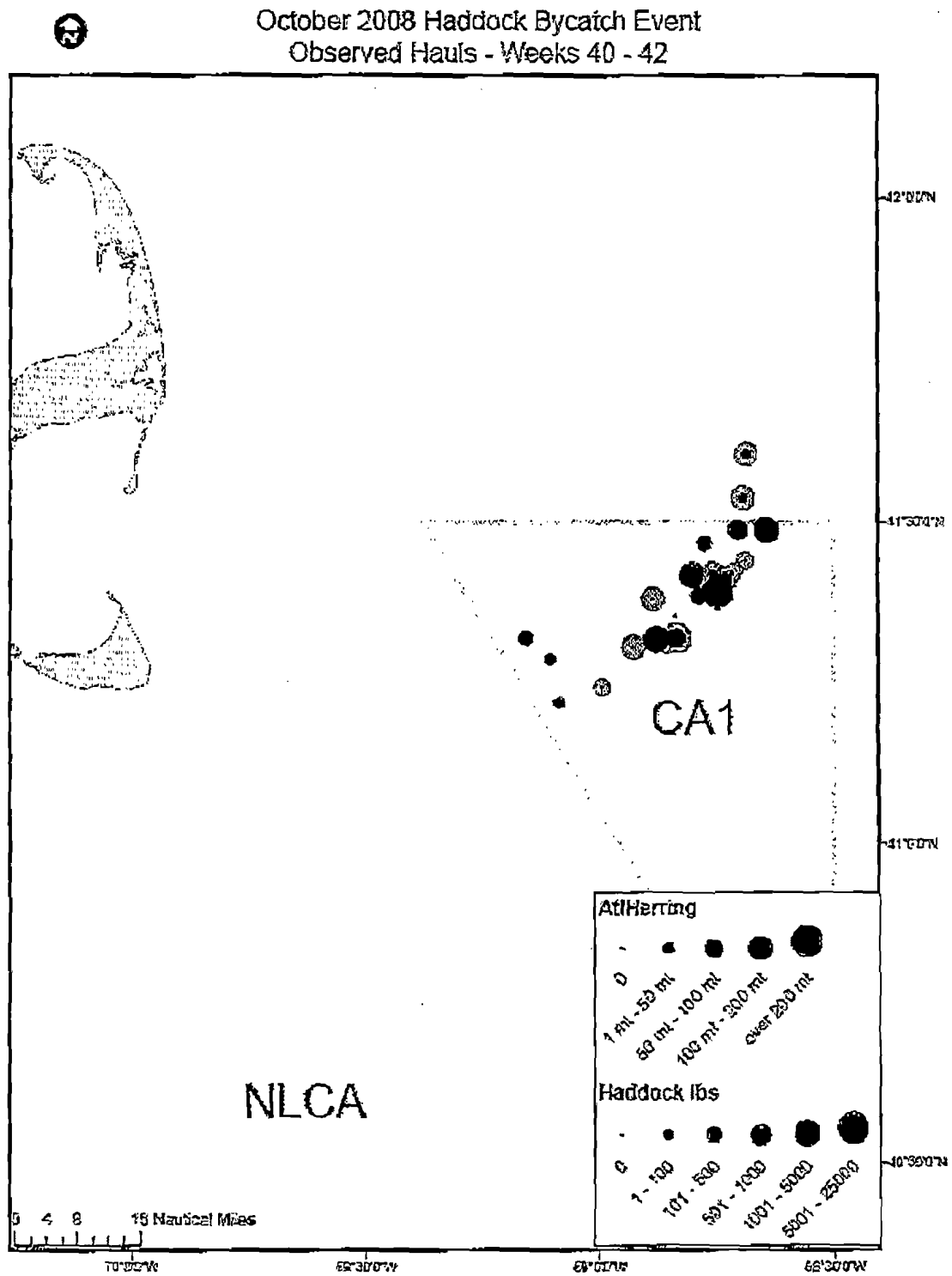


Figure 6