

Science, Service, Stewardship



Preliminary White Paper

Issues and Alternatives for the Future Management of
Atlantic Bluefin Tuna

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Purpose of Preliminary White Paper

- To Support Scoping in 2012 - Amendment 7 to the Consolidated HMS Fishery Management Plan
- The Preliminary White Paper (March 2012) may be revised based upon input from Advisory Panel, and further consideration by NMFS, and finalized for scoping. Subsequently it may serve as the foundation of the “pre-draft”.



Context - broad range of management objectives

- To prevent overfishing of Atlantic tuna, rebuild overfished Atlantic HMS stocks, monitor and control all components of fishing mortality so as to ensure long-term sustainability of the stocks and promote Atlantic wide stock recovery, minimize bycatch, manage for continuing optimum yield so as to provide the greatest overall benefit to the Nation, minimize to the extent practicable adverse social and economic impacts, provide a framework to take necessary action under ICCAT recommendations, and simplify HMS management.
- The objectives and potential measures listed in this document are intended to be catalysts for scoping, and should not be viewed as the entire range of options NMFS is taking into consideration



Background – Trends and Events

- ICCAT Recommendations
 - Reductions in TAC
 - Decreases in “carry-forward” (from unrestricted to 50% in 2007; from 50% to 10% in 2011)
 - Discontinuation of dead discard allowance in 2007
- Catch relative to adjusted quota has been increasing
- Estimates of U.S. dead discards in the PLL fishery are up due, in part, to change in methodology in 2007
- When calculating fishery category quotas for 2011, it became apparent that the adjusted 2011 BFT quotas would be insufficient to provide allocation at base level for all categories while also accounting for all anticipated dead discards at the beginning of the year. As a transitional approach, half of the anticipated dead discards were accounted for at the beginning of the year.



Potential Objectives

- Optimize Fishing Opportunity and Account for Dead Discards
 - Optimize the ability for all permit categories to harvest their full quota allocations, account for all mortality associated with discarded BFT in all categories, maintain flexibility of the regulations to account for the highly variable nature of the BFT fishery, and maintain fairness among permit/quota categories
- Enhance Reporting
 - Improve the scope and quality of landings and dead discard data through enhanced reporting and monitoring, to ensure that catch does not exceed the quota and to improve accounting for all sources of fishing mortality



Potential Objectives - continued

- Reduce BFT Dead Discards
 - Reduce dead discards of BFT and other non-target stocks, minimize reductions in target catch (applies to both directed and incidental BFT fisheries)
- Other
 - Adjust other aspects of the Consolidated HMS FMP as necessary and appropriate



Possible Management Measures

- Enhance reporting
- Reduce minimum sizes for commercial categories
- Deduct dead discards
- Modify tolerance rules for Purse Seine and Harpoon categories
- Longline catch cap
- Mandatory retention of legal-sized fish
- Eliminate target catch requirements for Longline category
- Fishing industry communication of hot spots
- Revise quota allocations
- Maximum catch limit for Angling category
- Modification to PLL closed areas
- Modify subquota rules



Possible Management Measures - continued

- Establish quota and rollover for Northern albacore
- Allow shore-based angler catch of BFT
- Modify current permit category rules regarding changes within 10 days
- Allow stowage of prohibited gear
- Define and authorize the use of bait nets



Enhanced Reporting

- Description – Enhance the scope and/or quality of reporting for all permit categories by implementing specific measures for each category. For example:
- General category: Report discards via an automated reporting system, make use of other existing data (from reporting requirements associated with other commercial permits)
- Angling category: Increase timeliness and/or scope
- Charter / headboat Category: Increase timeliness and/or scope
- Longline category: Submission of data via VMS or increase observer coverage
- Purse Seine, Harpoon, and Trap categories: report discards via an automated reporting system



Reduce Commercial Minimum Size

- Objective – Reduce discards and optimize fishing opportunity.
- Description – For some or all of the commercial permit categories, the current minimum size could be reduced to within the range of the ICCAT minimum size of 47 to 73 inches.
- Relationship to other measures - This measure would augment other measures designed to reduce dead discards. It may be prudent to link this measure to enhanced reporting requirements to obtain better catch information. If allocations for commercial categories are modified, this measure may mitigate the negative impacts, in addition to reducing dead discards.
- Justification - Reduction of the minimum size would reduce dead discards, and enable the sale of fish that would otherwise be discarded dead.



Deduct Dead Discards

- Objective – Account for dead discards & optimize fishing opportunity.
- Description – For each quota category, the deduction of dead discards would be a part of the annual specification process, in conjunction with the allocation of quota among categories
 - Dead discard estimate, or
 - Dead discard proxy
- Justification –
 - Ensures that dead discards will be accounted for, and the adjusted quota will be set appropriately to allow the total quota to be caught, but not exceeded
 - Maintain consistency with ICCAT Recommendation 10-03
- Relationship to Other Measures - reporting measures, allocation system



Modify Tolerance Rules for Purse Seine and Harpoon Categories

- Objective – Reduce discards and optimize fishing opportunity.
- Description – The annual or per trip tolerance of large medium BFT for the Purse Seine category could be modified. For the Harpoon category, NMFS could establish inseason management authority to modify the Harpoon category retention of large medium BFT (within the range of zero to four fish).
- Relationship to other measures – If the allocation for the Purse Seine or Harpoon category is adjusted, this measure may mitigate the negative impacts, in addition to reducing discards.
- Justification - Reduction of dead discards, and mitigation of quota reallocation.



Longline Catch Cap

- Objective – Reduce Discards
- Description – Implement a cap for the PLL fishery that would result in the cessation or restriction of fishing for all HMS when the PLL BFT quota (or a designated portion of the quota is caught)
- Relationship to Other Measures – The effectiveness of a cap could be enhanced by other associated measures, such as mandatory retention of legal-sized fish, closing areas where high interaction rates occur, and elimination of target catch. Catch caps are closely related to the reporting measures because in order to have an effective cap that limits catch and maximizes fishing opportunity, landings and discards need to be reported and monitored accurately.
- Justification – Currently, the total amount of BFT caught by PLL vessels on an annual basis is not limited.



Option A – Individual Catch Cap

- Description - Individual vessel allocation; When allocation caught, use of PLL gear stops; Could be transferable among vessels within the LL and/or Purse Seine categories.
- Relationship to Other Measures – Alternative strategies: regional catch cap or reallocation of base quotas
- Justification – A catch cap that is set at the level of an individual vessel provides strong incentives to reduce discarding at the level of an individual vessel. The ability to transfer provides flexibility in order to adjust the amount of quota an individual vessel has, and reduce situations where some vessels have more quota than they need and some have less than they need.



Individual Catch Cap – How to Allocate ?

- Based upon the vessel's historical catch or landings (it may be necessary to implement a new control date)
- Allocate an equal share of the Longline category subquota (divide the subquota by the number of eligible vessels)
 - Allocation of quota equally among vessels has advantages, given the potential difficulty of developing allocations based upon historical catch.
- An allocation formula could be based upon an equal share, but then adjusted based upon historical catch, in order to provide incentives or address other concerns.



Option B – Catch Cap by Region

- Description – Catch caps for the relevant geographic regions
- How it Could Work:
 - When NMFS projects that the catch cap for a region has been caught (or a threshold attained), fishing with PLL gear for all HMS would be **prohibited** .
 - when NMFS projects that a defined percentage of the regional cap is caught (such as 80%), the use of PLL gear would be **restricted**: *(prohibited within a sub-area of the relevant region, but fishing with PLL gear outside that sub-area within the region would be allowed)*
- Justification – Take into account regional differences in the fishery, and optimize fishing opportunity. Multiple caps instead of a single for the whole fishery would impact only those areas where bycatch is occurring.
- Relationship to Other Management Measures – The amount of BFT allocated to a specific region could take into account the effectiveness of time/area closures and gear restrictions in that area.



Mandatory Retention of Legal-Sized BFT

- Objective – Reduce Discards.
- Description – The Longline category would be required to retain all legal-sized fish. A threshold amount could be set, beyond which revenue generated by the sale of BFT would not go to the vessel, but would be designated for a particular use such as funding observers or research.
- Relationship to Other Measures – This measure could be used in conjunction with a BFT catch cap for Longline vessels and/or a reduction in minimum size.
- Justification – There is currently not a prohibition on discarding legal sized BFT. This would help to ensure that legal-sized fish that are caught, are kept and counted toward the catch cap, and could increase effectiveness of a Longline catch cap.



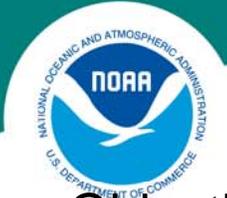
Eliminate Target Catch Requirements for Longline Category

- Objective – Reduce discards and optimize fishing opportunity.
- Description – Eliminate PLL target catch requirements.
- Relationship to other measures - This measure could be used in conjunction with a BFT catch cap for Longline vessels.
- Justification - Elimination of the target catch requirement could reduce discarding because vessels would not be constrained regarding the amount of BFT they could retain on a particular trip. The overall cap provides incentive to reduce interactions with BFT.



Fishing Industry Communication of Hotspots

- Objective – Reduce BFT discards and optimize fishing opportunity.
- Description – In conjunction with a catch cap, implement a fishery-based BFT avoidance system where the LL fleet voluntarily provides real-time information regarding the location of BFT through e-mails sent via VMS. A third party such as an academic or research organization could compile the fleet information and e-mail the locations of hot-spots back to the fleet.
- Relationship to Other Measures – In association with a LL catch cap, there may be increased incentives for the LL fleet to cooperate in order to avoid BFT and provide increased fishing opportunity for target species.
- Justification – Avoid catch of BFT and optimize catch of target species.



Revise Quota Allocations

- Objective – Account for dead discards & optimize fishing opportunity
- Description – Modify current base allocations for quota categories
 - Immediate change or phased in
 - Revise based upon current allocation and recent catch
 - Create landings allocations (at a percentage lower than current allocations)
 - Redistribute quota from one quota category to another
- Justification –
 - Account for dead discards
 - Reduce uncertainty in fishery
 - Maintain opportunities and fairness
 - Maintain consistency with ICCAT Recommendation 10-03
- Relationship to Other Measures – LL catch cap, reporting, closed areas



Option A – Revise Based on Current Allocation and Recent Catch

- Revise allocations, using a mathematical approach.
- Assign relative weights to current allocation and recent catch.
- e.g., 70% current allocation: 30% recent catch
- $(.70 \times \text{current allocation}) + (.30 \times \text{catch}^*) = \text{allocation}$
**catch: average % of total catch over a designated time period*
- Cap landings for categories with an increased allocation.



Option B – Create Landings Allocations

- Create landings allocations for each category that are lower than the current allocations.
- Increase the Reserve category.
- The difference between the current allocation and the lower landings allocation is what accounts for the discards.
- For example, to illustrate the magnitude of the discards that can be accounted for, using a base quota of 923.7 mt, if all category allocations, except LL were reduced by 10%, with the Longline category reduced by 20%, this would account for about 92 mt of discards.



Option C – Redistribution of Quota

- To account for dead discards, and align the quota with recent levels of catch:
- Redistribute quota from categories for which recent catch has been low (relative to their allocations) to categories that have insufficient quota to account for dead discards.
- The amount of dead discards that are accounted for drives the amount of allocation change.



Maximum Catch Limit for Angling Category

- Objective – Reduce dead discards, and minimize post-release fishing mortality.
- Description – A maximum catch (kept and released) limit per trip, could be set for the Angling category and for the Charter/Headboat category when fishing recreationally. The catch limit could be specified in relation to the retention limit (equal to, twice, etc.).
- Relationship to Other Measures – This measure could augment the commercial measures designed to reduce discards.
- Justification – Limit the number of fish caught and released, due to the minimum size restriction or high-grading. Reducing the number of potential hook-ups may reduce post-release mortality, given the potential for long fights.



Modification to PLL Closed Areas

- Objective – Reduce dead discards of BFT while minimizing reductions in target catch and optimizing fishing opportunity.
- Description – Modify contours of existing PLL closed areas and /or timing of the current closures; or implement new closed areas.
- Relationship to Other Measures – Closures could augment other measures designed to reduce discarding.
- Justification – A time/area closure may be effective in reducing dead discards, while having limited impacts on the catch of target species. The effectiveness of the closure depends upon the time and area of the closure coinciding with the presence of BFT within the closure area, as well as the availability of target species in the area outside of the closure.



Option A – Implement a New Closure Area in the Cape Hatteras Special Research Area (CHSRA)

- **Description** – Implement a new closure area for a portion of the year, or year round in the currently defined CHSRA.
- **Justification** – Because this area has historically been associated with a relatively high rate of interaction between BFT and PLL gear, creating a new closure area would likely reduce the number of such interactions and reduce discards.

Option B – Modify Northeastern U.S. Closed Area

- **Description** – Modify the boundary of the Northeast U.S. Closed Area
- **Justification** - If the adjacent area or another time period has historically exhibited a relatively high rate of interaction between BFT and PLL gear, modification of the current closed area boundary or timing may reduce the number of BFT interactions and reduce discards

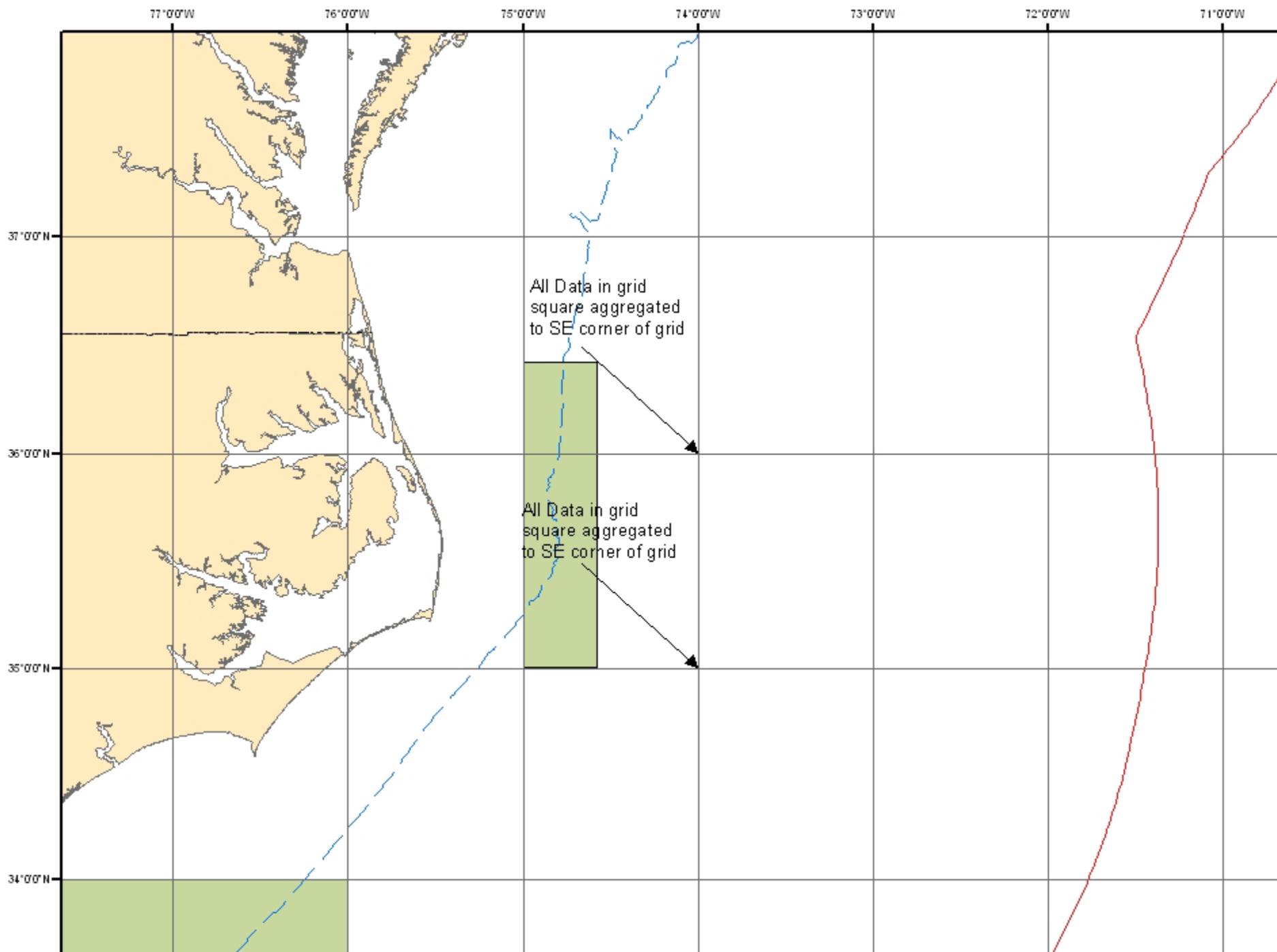


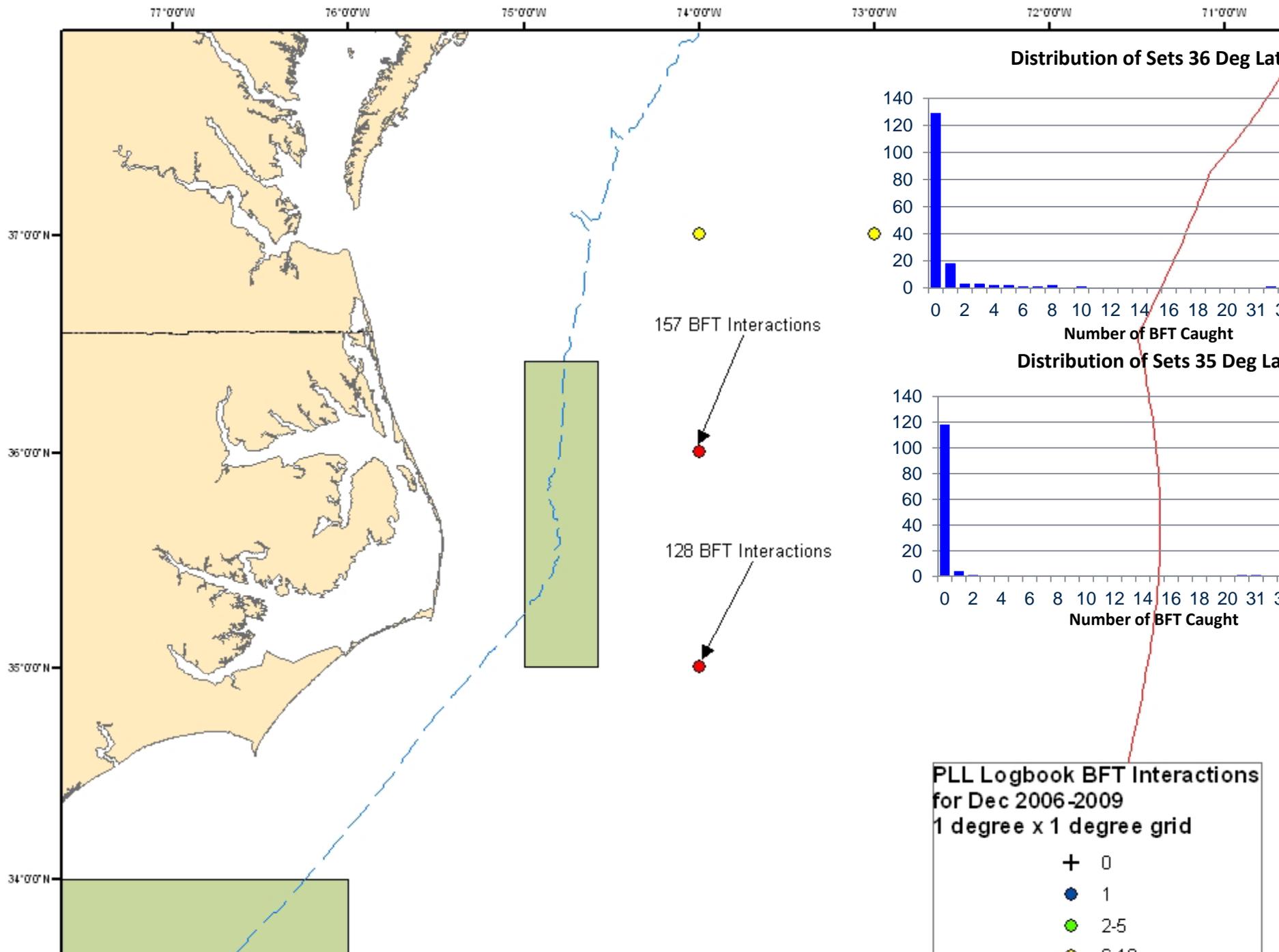
Option C - Modify the Charleston Bump Closed Area

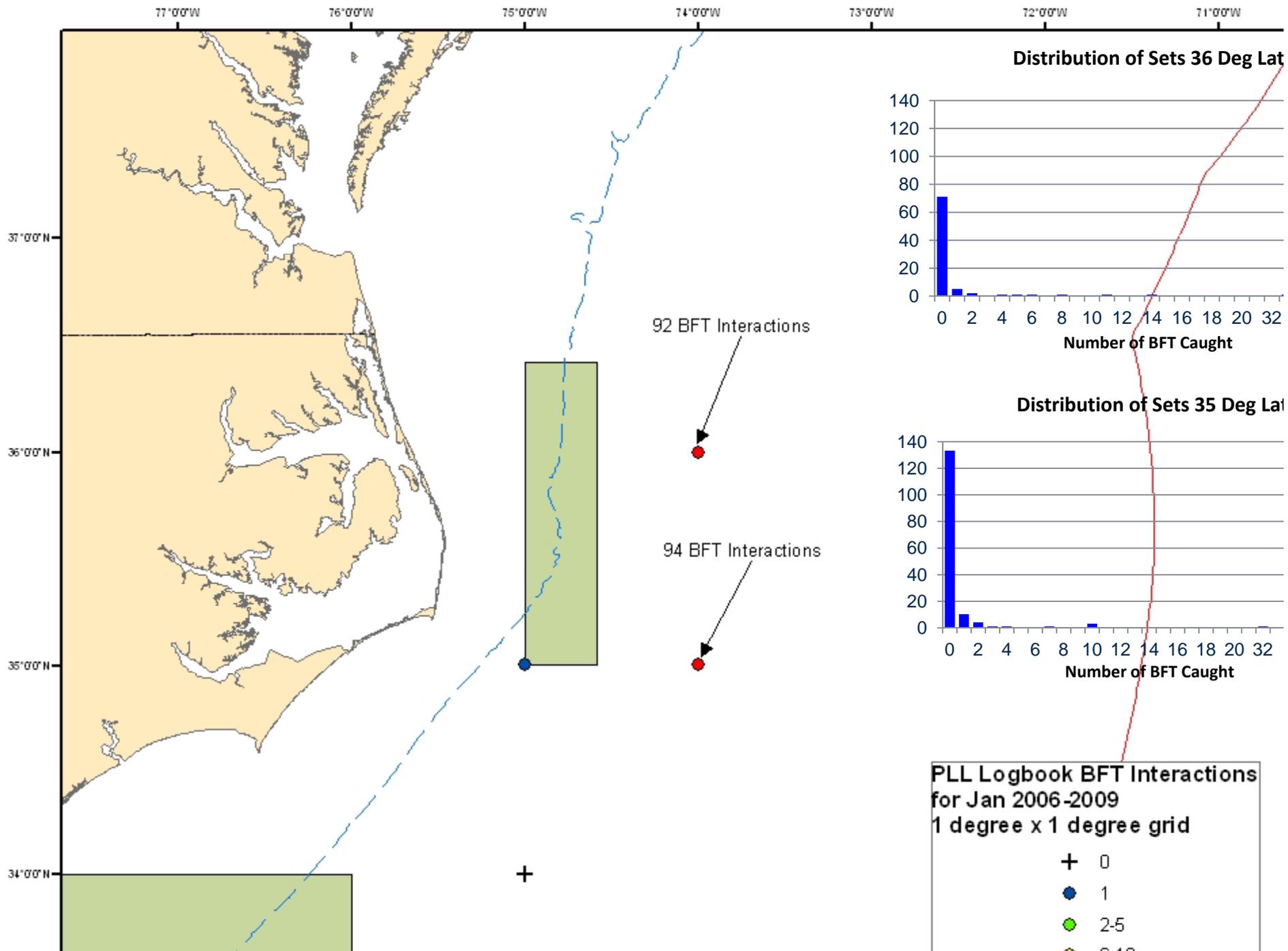
- Description – Reduce the size of the closure area
- Justification – If the area east of the Charleston Bump Closed Area has a relatively low rate of interaction between BFT and PLL gear, reducing the size of the closed area may have minimal impact on the catch of BFT by PLL gear, but could provide additional fishing opportunity for PLL target stocks and mitigate the potential impacts of new closures.

Option D – Implement a New Closure Area in a Portion of, or the entire Gulf of Mexico (GOM)

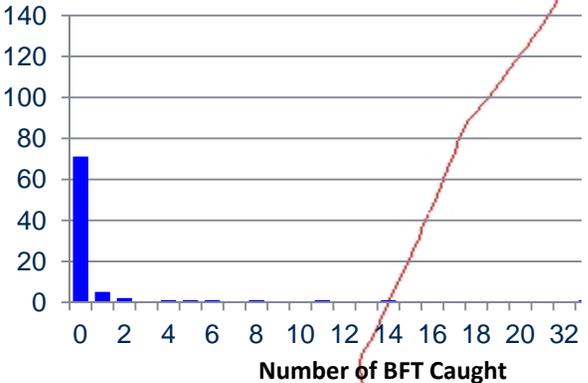
- Description - Implement a new closure area for a portion of the year or year round in the central portion of the GOM, or the entire GOM, selected on the basis of interactions of BFT with PLL during peak abundance of BFT, and distribution of target species.
- Justification – A new closure area may reduce discards and provide benefits to the stock if spawning activity is protected.



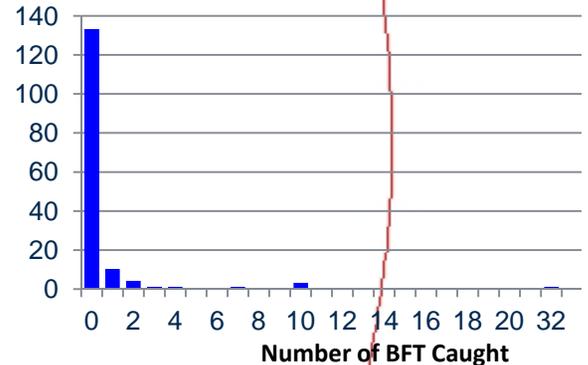




Distribution of Sets 36 Deg Lat



Distribution of Sets 35 Deg Lat



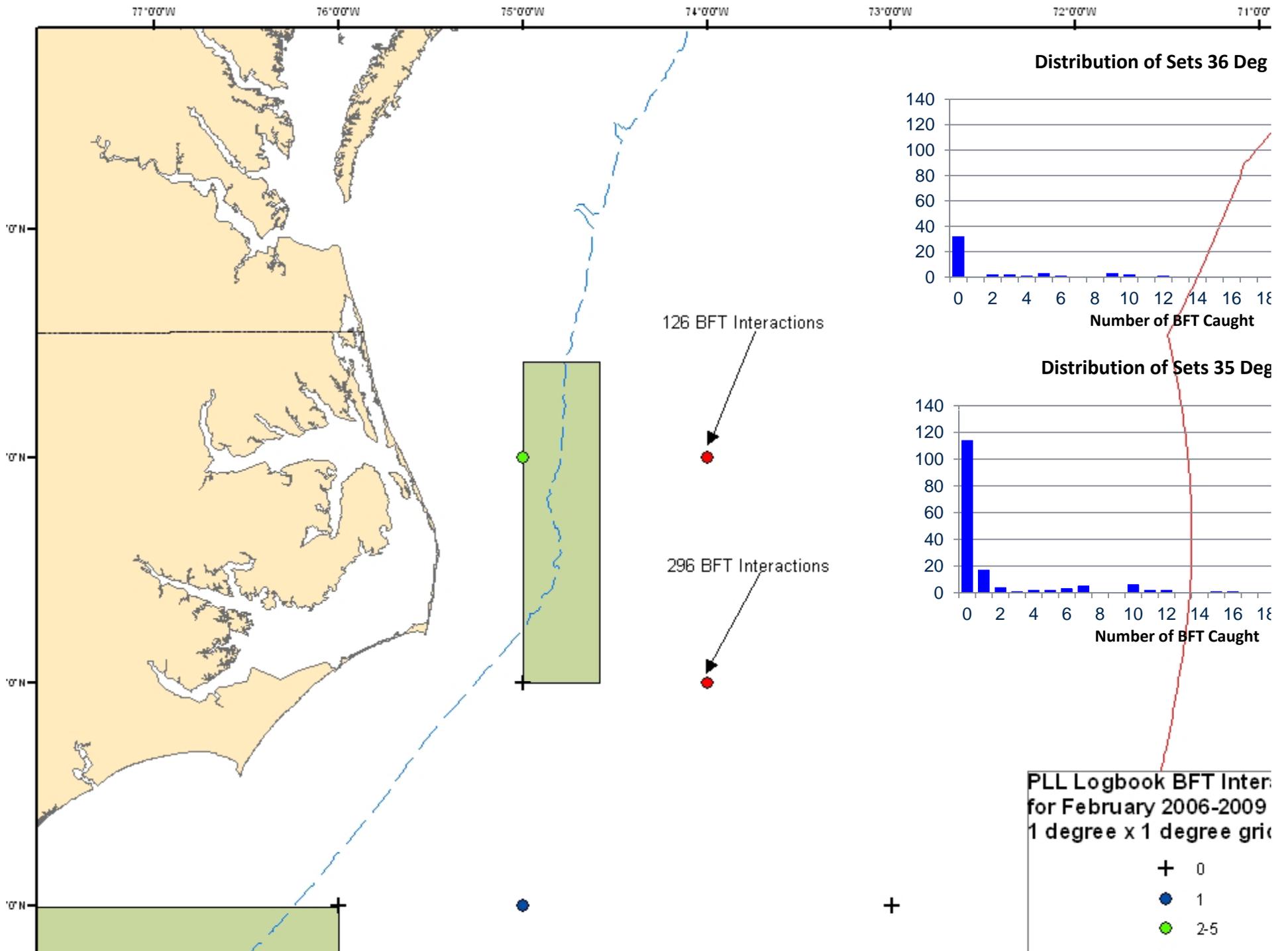
PLL Logbook BFT Interactions for Jan 2006-2009
1 degree x 1 degree grid

- + 0
- 1
- 2-5
- 6-10

92 BFT Interactions

94 BFT Interactions

+

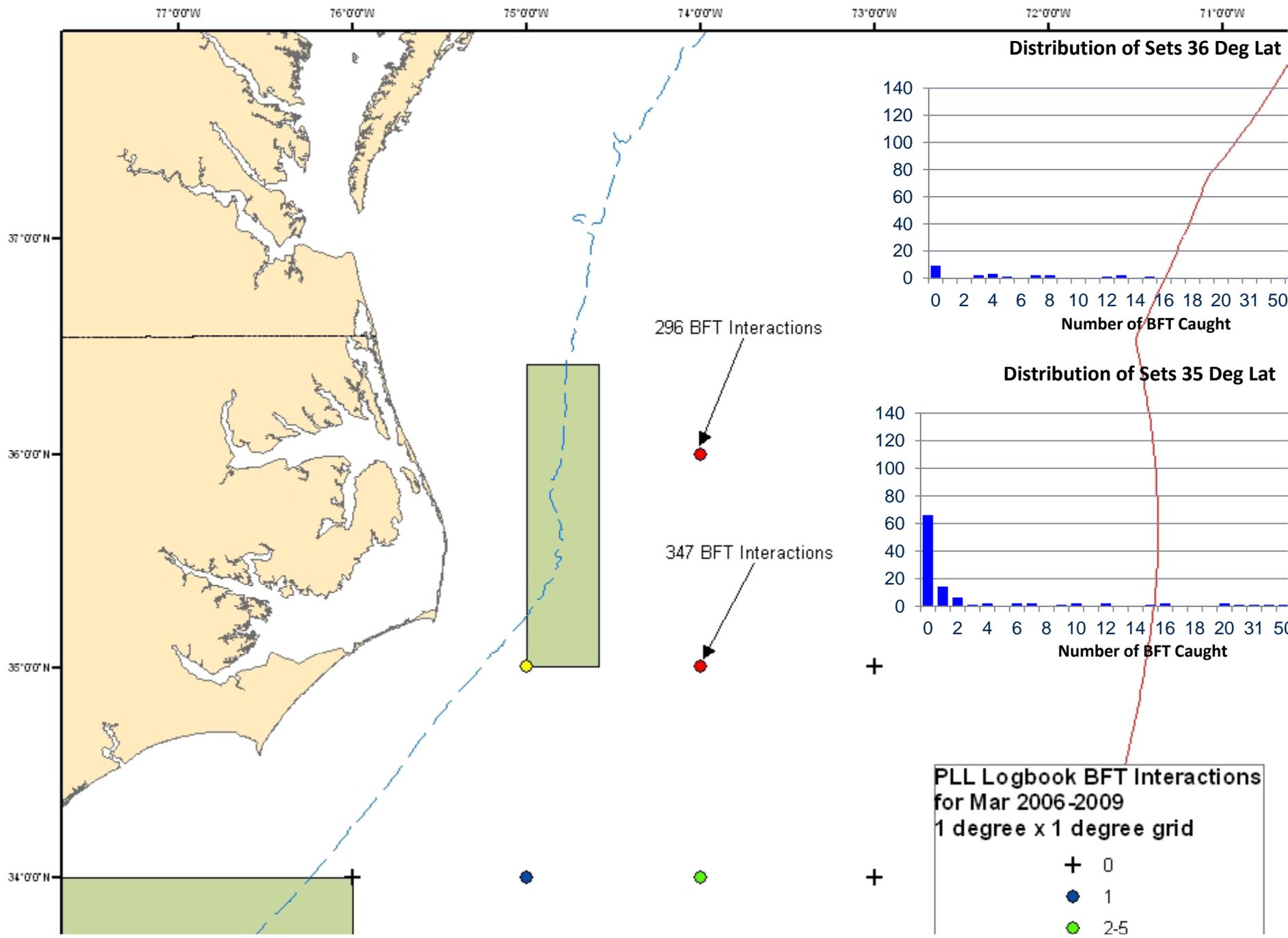


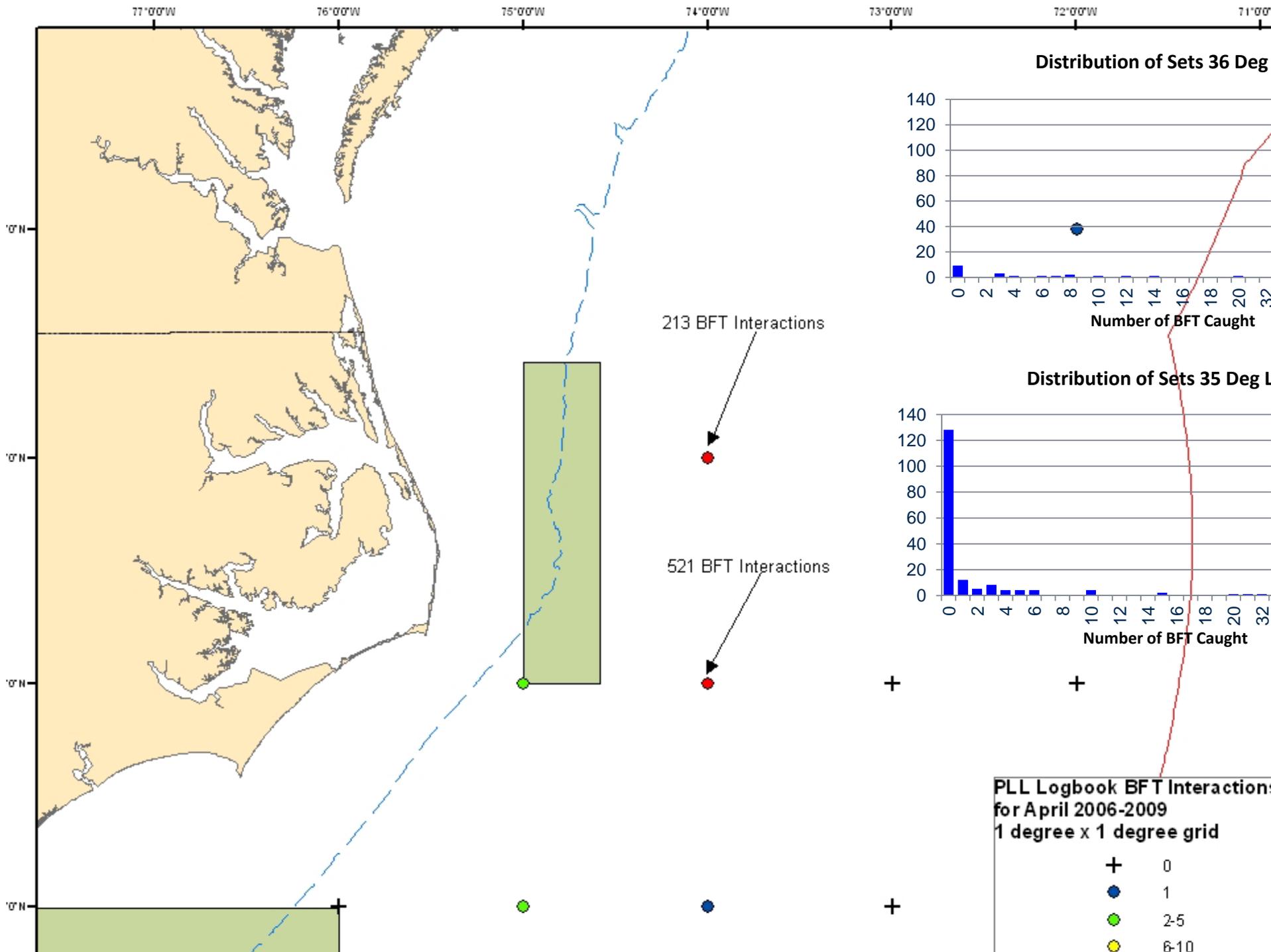
126 BFT Interactions

296 BFT Interactions

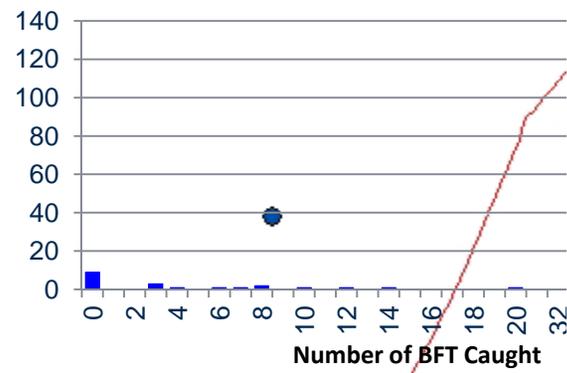
PLL Logbook BFT Interactions
for February 2006-2009
1 degree x 1 degree grid

- + 0
- 1
- 2-5

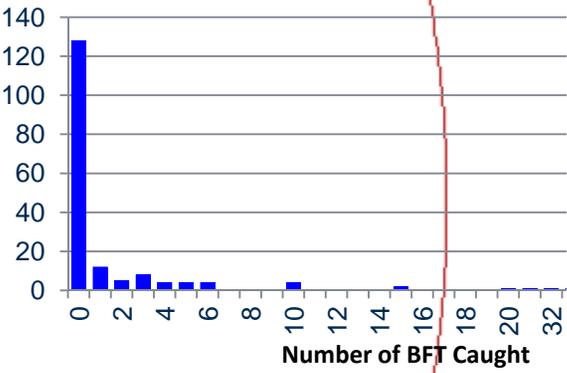




Distribution of Sets 36 Deg



Distribution of Sets 35 Deg L

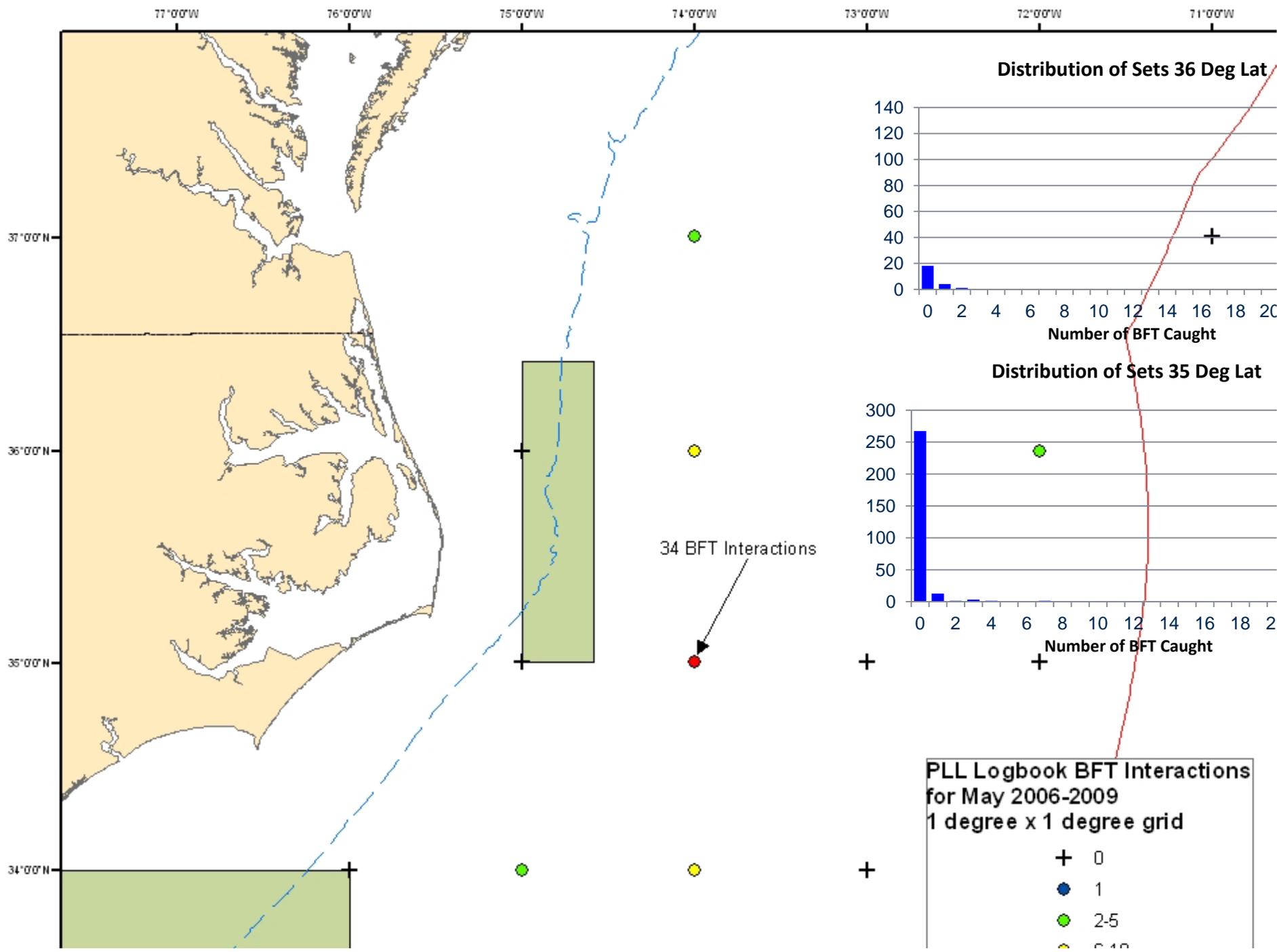


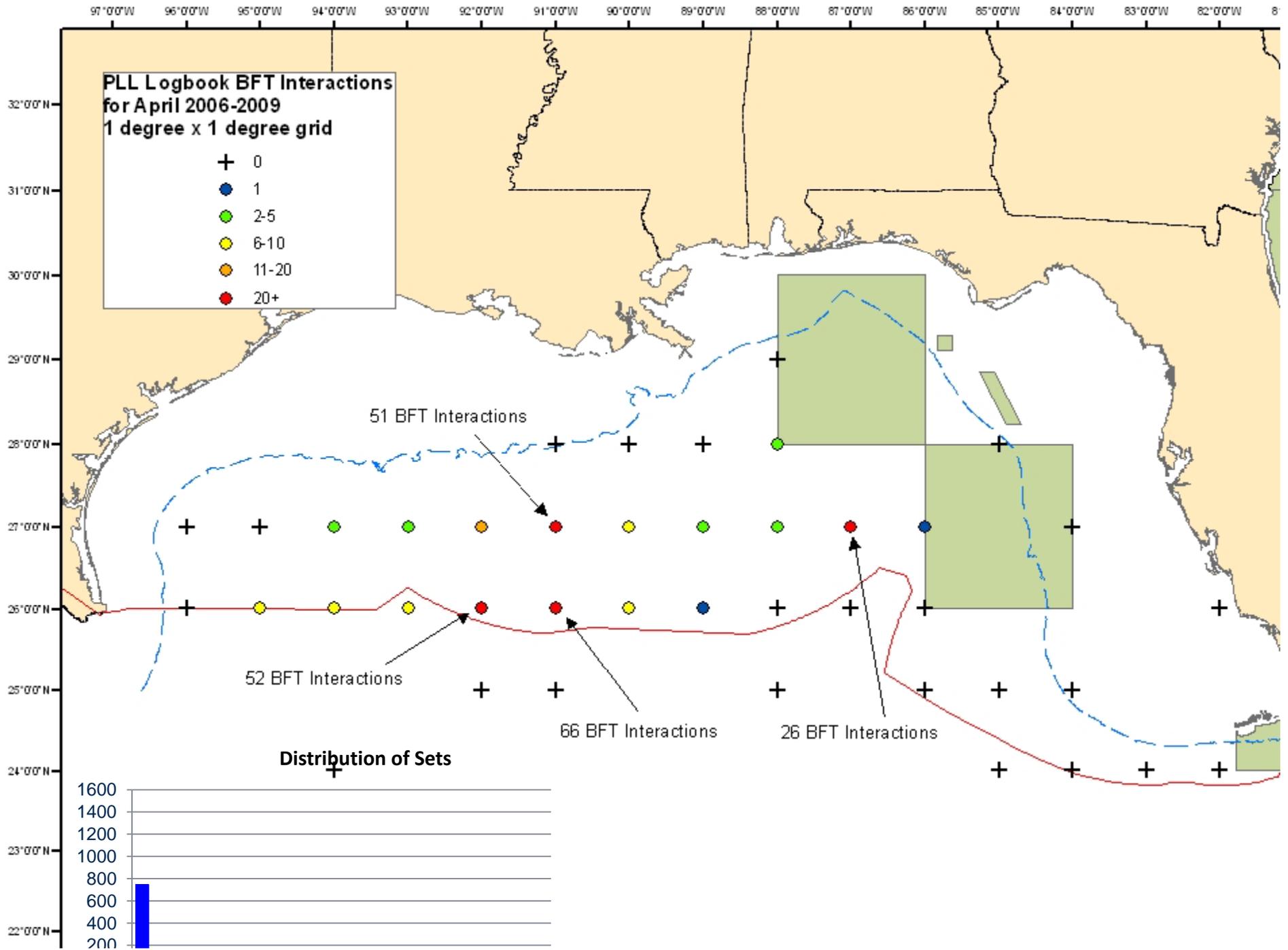
PLL Logbook BFT Interaction:
for April 2006-2009
1 degree x 1 degree grid

+	0
●	1
●	2-5
●	6-10

213 BFT Interactions

521 BFT Interactions



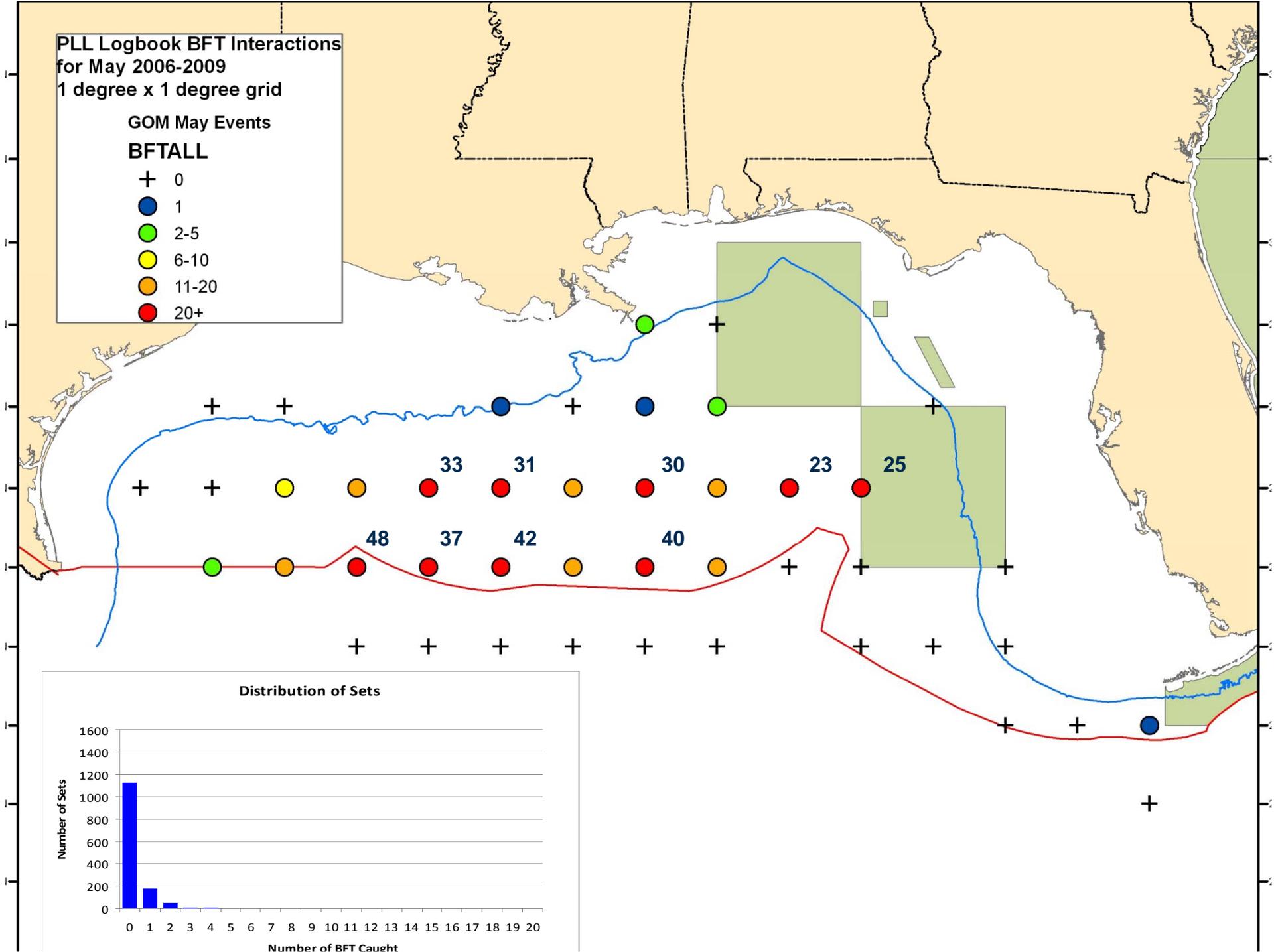


**PLL Logbook BFT Interactions
for May 2006-2009
1 degree x 1 degree grid**

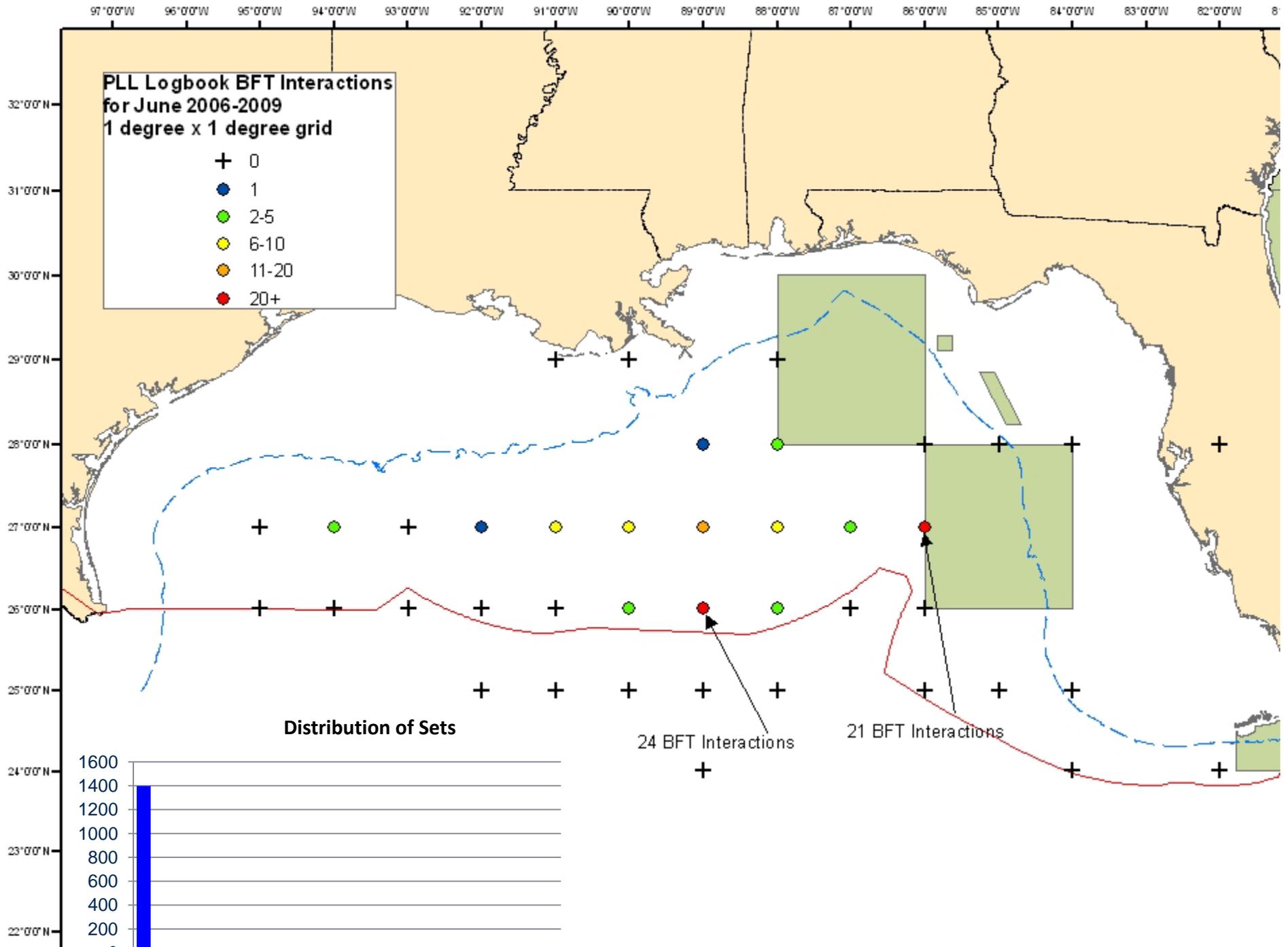
GOM May Events

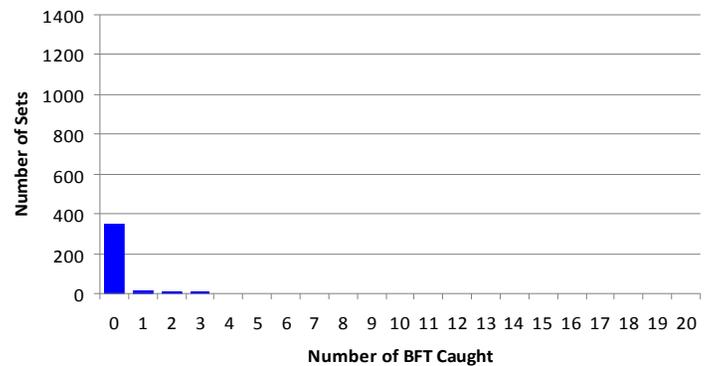
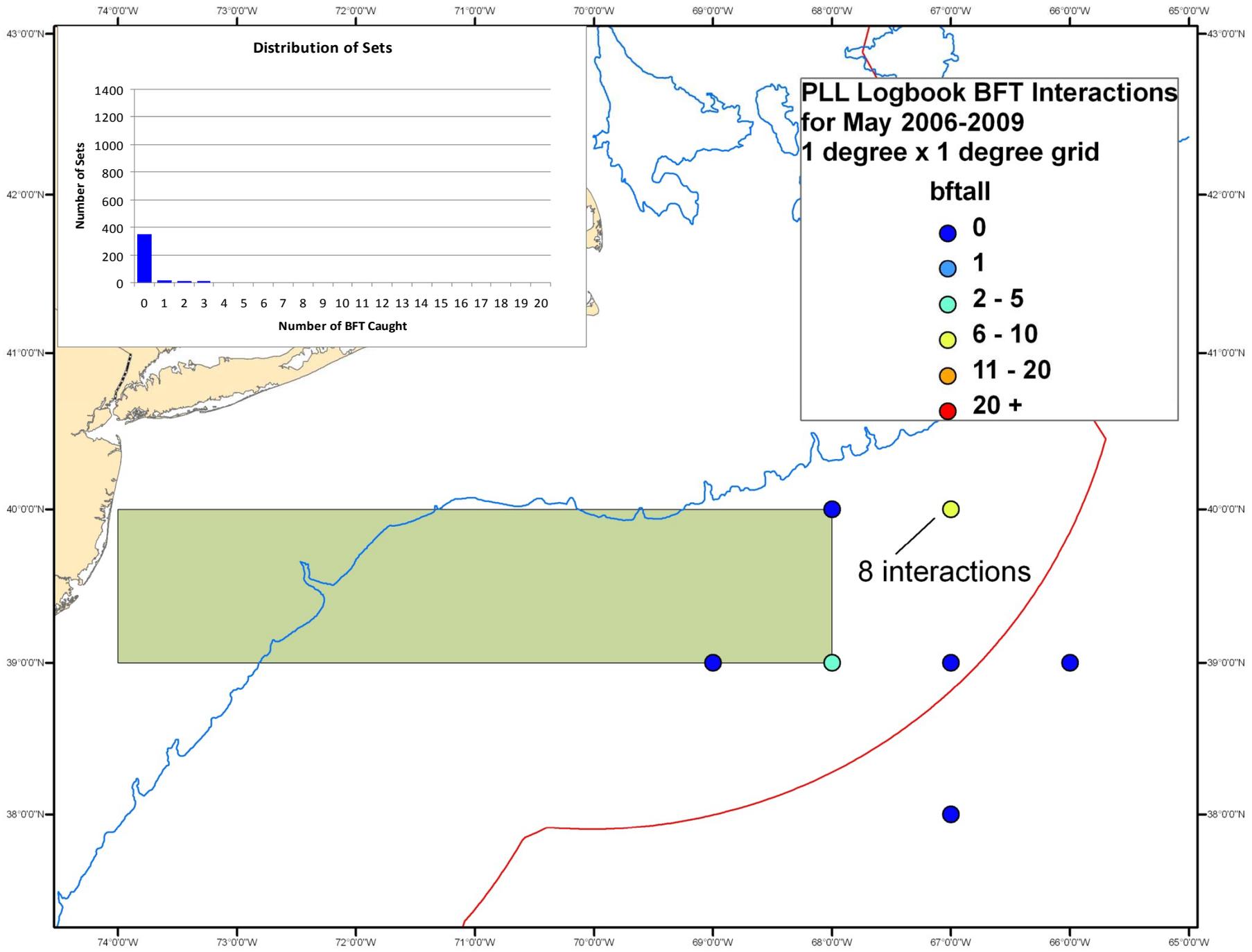
BFTALL

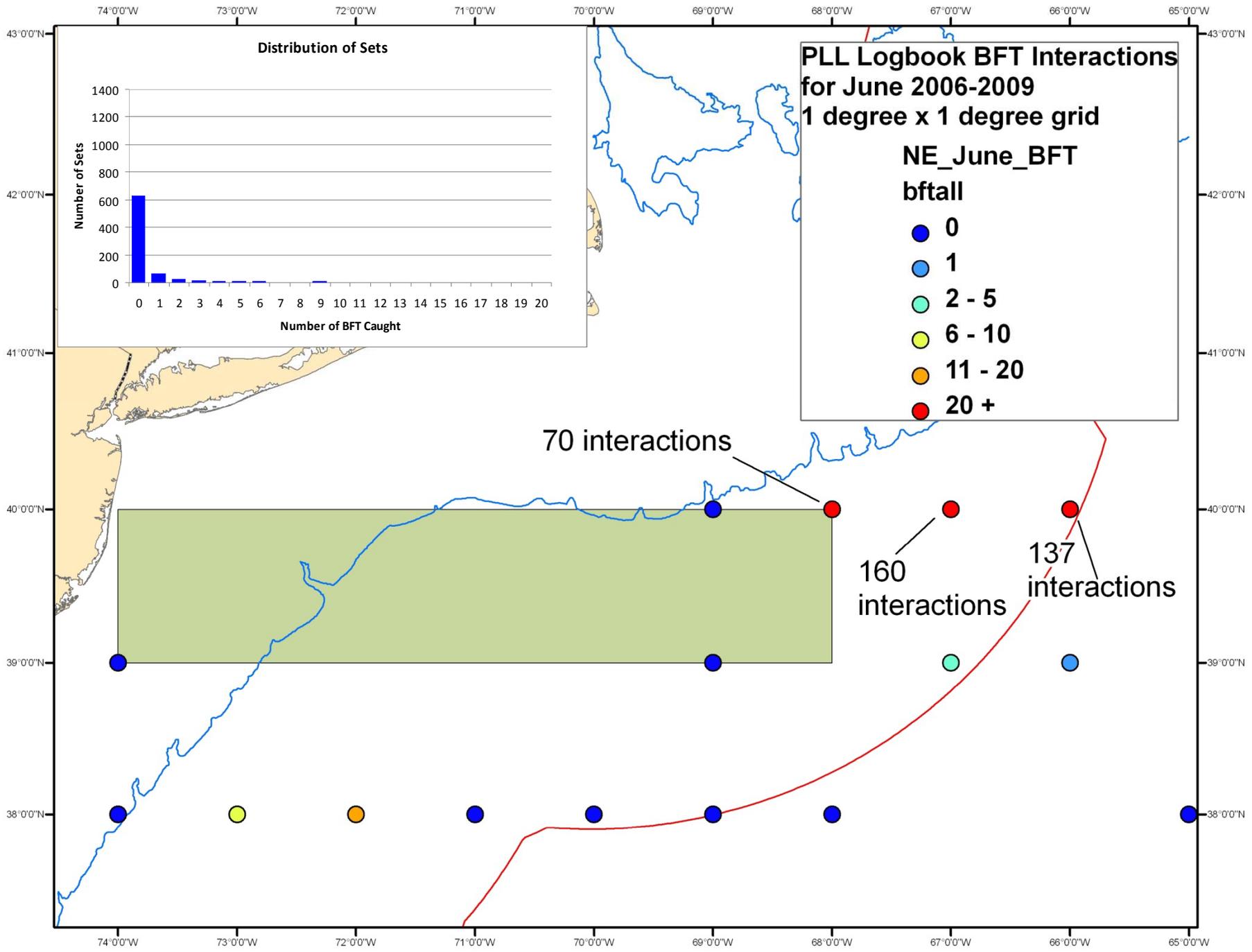
- + 0
- 1
- 2-5
- 6-10
- 11-20
- 20+

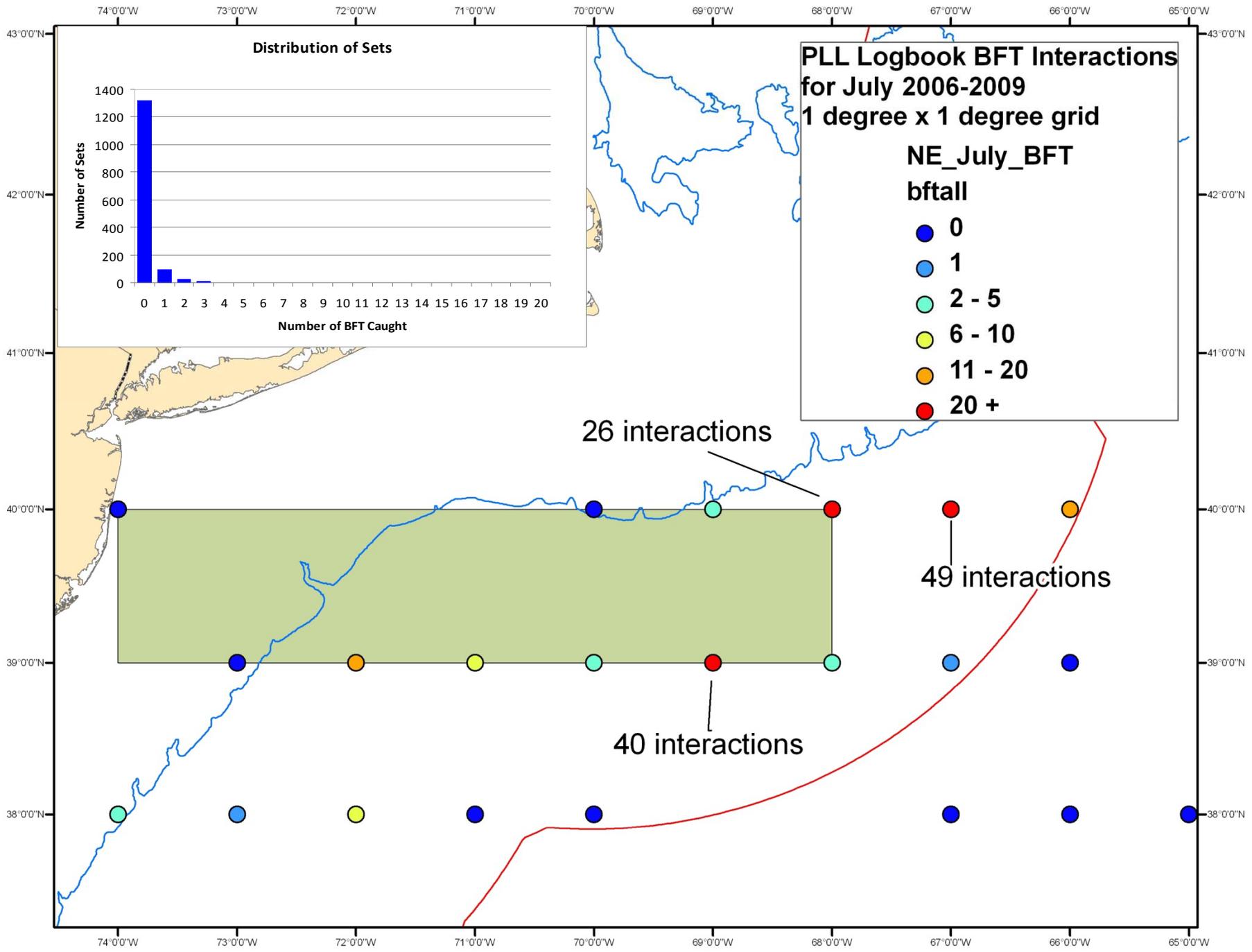


33 31 30 23 25
48 37 42 40











Modify Subquota Allocations

- Objective – Optimize the ability for all permit categories to harvest available subquotas, and maintain flexibility and fairness. Account for dead discards.
- Description – Modify the regulations that allocate quota among time periods and / or redefine the type of quota transactions that may occur.
- Relationship to Other Management Measures - This type of measure is closely related to the reallocation of base quota among categories. This strategy could augment reallocation as a means to obtain flexibility to account for dead discards and optimize fishing opportunity.



Modify Subquota Allocations – Option A

- Description – Modify General Category sub-period allocations to achieve a new seasonal distribution of allocation.
- Justification – Modification of the sub-period allocation could result in better distribution of quota among seasons and geographic areas.
- Consideration – It is difficult to develop a single optimal allocation scheme among seasons, given the temporal and geographic variability of BFT availability on the fishing grounds. Some fishery participants may benefit and some may experience decreased fishing opportunities.



Modify Subquota Allocations – Option B

- Description – Modify Angling category percentages between North and South, divide into finer scale regional allocations, or split large school and small medium fish into two quota categories.
- Justification – Modification of the allocations could result in better distribution of quota and size classes among seasons and geographic areas.
- Consideration – It is difficult to develop a single optimal allocation scheme, given the temporal and geographic variability of BFT availability on the fishing grounds. Some fishery participants may benefit and some may experience decreased fishing opportunities.



Northern Albacore – Establish Quota & Rollover Provisions

- Objective – Adjust other aspects of the Consolidated HMS FMP as necessary and appropriate.
- Description - Establish a requirement for an annual specification of northern albacore quota and rollover provision, requiring deduction of excess catch and roll-over of underharvest in accordance with ICCAT recommendations.
- Justification – The U.S. would be in compliance with the ICCAT recommendation and management of northern albacore would be enhanced. In 2011, ICCAT adopted a recommendation to establish annual TACs for 2012 and 2013, and rules regarding an unused or excess catch of an annual quota. Under ICCAT Recommendation 11-04, the maximum amount of underharvest that may be carried forward is 25% of the initial quota.



Other Measures (to adjust the FMP as necessary)

- Allow shore-based anglers to keep BFT
- Modify permitting rule that disallows a change in category after 10 days
- Allow storage of prohibited gear
- Define and authorize the use of bait nets

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Other Ideas



Amendment 7 Tentative Schedule

- Scoping – Spring 2012
- “Predraft” - Fall 2012
- Proposed Rule – early 2013
- Public Hearings – Spring 2013
- Implementation – Jan 2014



Possible Scoping Locations

- NEFMC Meeting (location TBD) ;
- MAFMC Meeting (location TBD) ;
- SAFMC Meeting (location TBD) ;
- GOMFMC Meeting (location TBD) ;
- CFMC Meeting (location TBD)
- Gloucester. MA;
- Barnegat, NJ;
- New Orleans, LA

END

