

South Atlantic Recreational Fisheries With High Release Mortality



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April 11, 2012



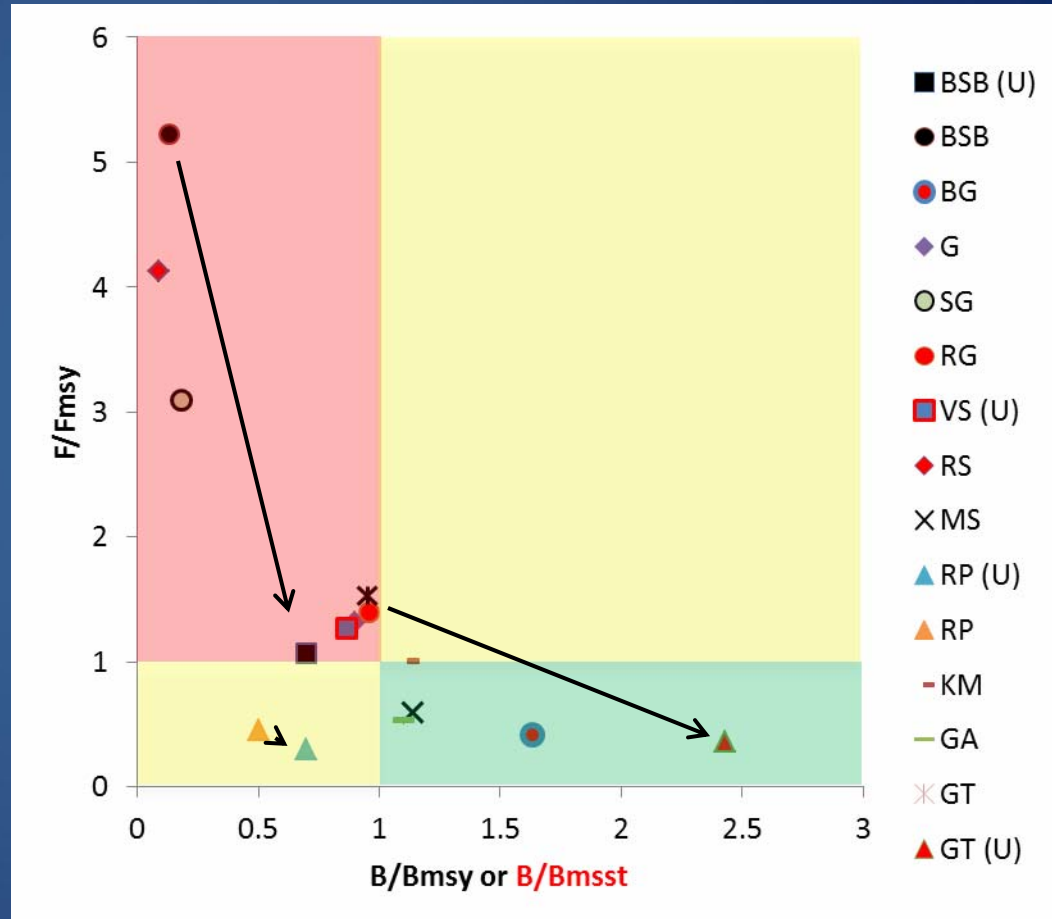
Discard Mortality

- Important parameter in stock assessments and projections
- Sources
 - Hook type, Hook location, Swim bladder physiology/morphology, Size, Air exposure, Temperature difference, Predators (Rummer 2007)
- South Atlantic Fisheries
 - Inshore- Spotted Seatrout, Red Drum, Striped Bass
 - Pelagic- Cobia, Amberjack, Mackerels
 - Reef Fish- Black Sea Bass, Snappers, Groupers



Status of SA SEDAR Assessed Stocks

- SEDAR reviews data and assessments
- Overfishing ($F/F_{msy} > 1$)
 - 10 assessments
- Overfished ($B/B_{msy} < 1$)
 - 9 assessments



BSB-Black Sea Bass, BG-Black Grouper, G-Gag, SG- Snowy Grouper, RG-Red Grouper, VS-Vermilion Snapper, RS-Red Snapper, MS- Mutton Snapper, RP-Red Porgy, KM-King Mackerel, GA-Greater Amberjack, GT-Tilefish, (U)-Update

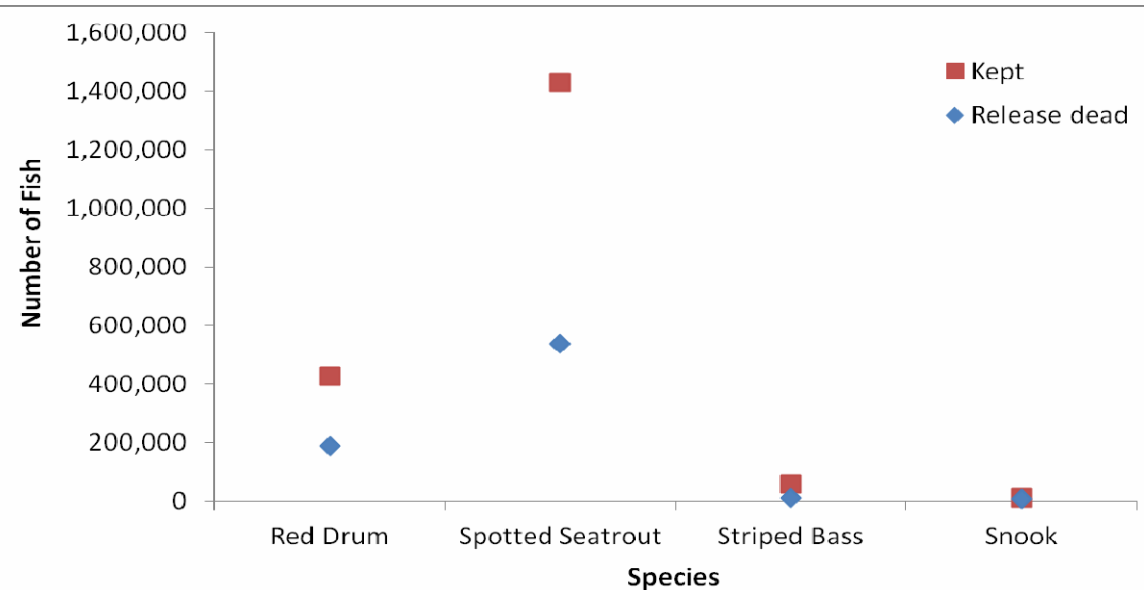
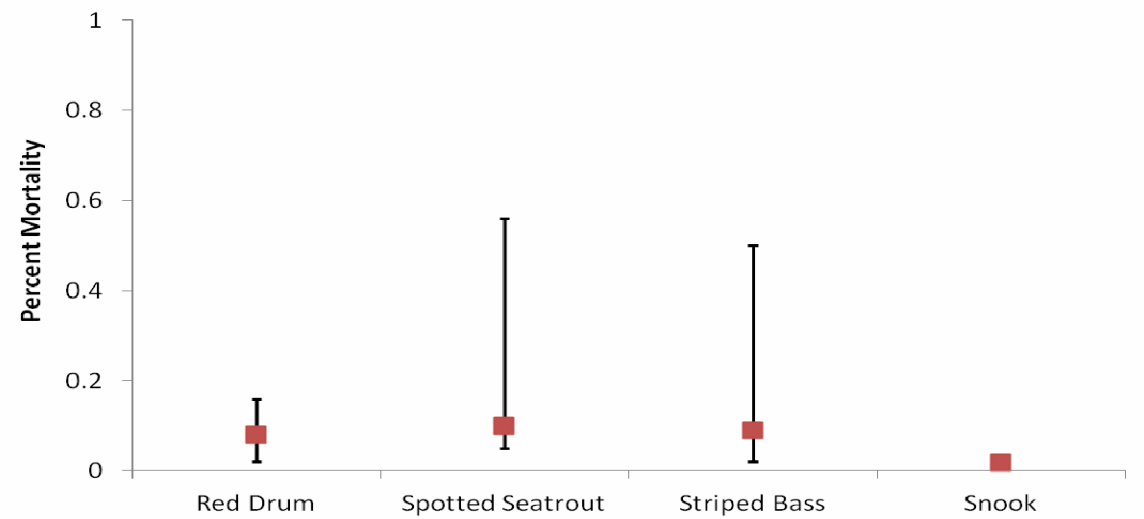
SA Recreational Catch Estimate

Species	Rank	2005-2010	
		Avg Catch (A + B1+ B2)	Avg Release
Herrings	1	9,163,914	17%
Mulletts	2	7,647,418	26%
Spotted Seatrout	3	6,806,774	79%
Black Sea Bass	11	2,932,351	84%
Red Drum	12	2,775,303	85%
Spanish Mackerel	15	1,610,978	36%
King Mackerel	30	645,414	26%
Groupers	38	441,799	77%
Vermilion Snapper	41	317,708	46%
Red Snapper	43	243,262	81%
Striped Bass	48	179,501	67%
Greater Amberjack	51	75,525	48%

Inshore, Pelagic, Reef Fish, Other

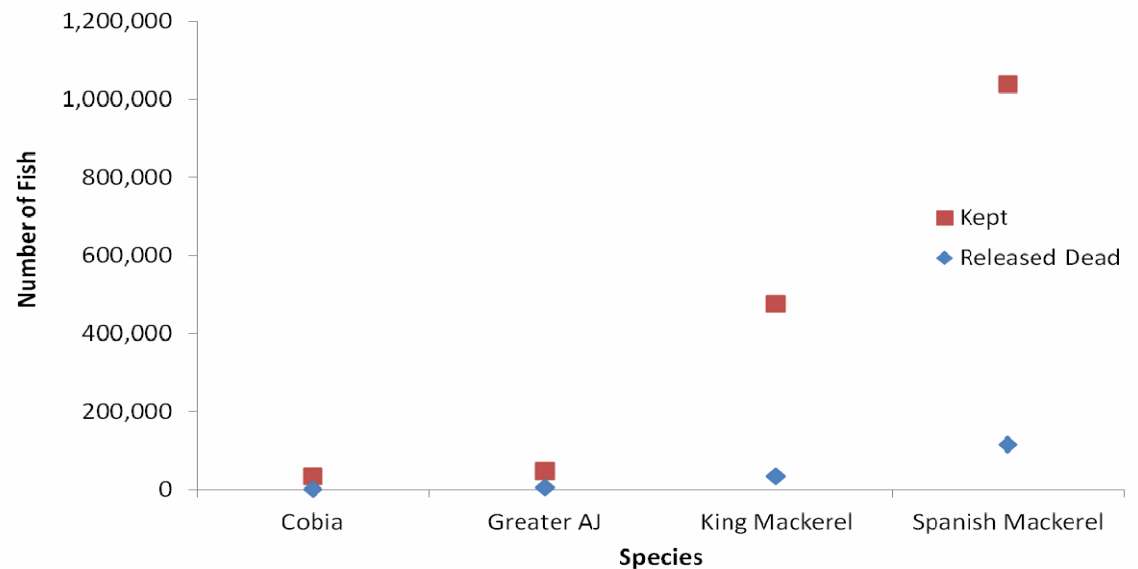
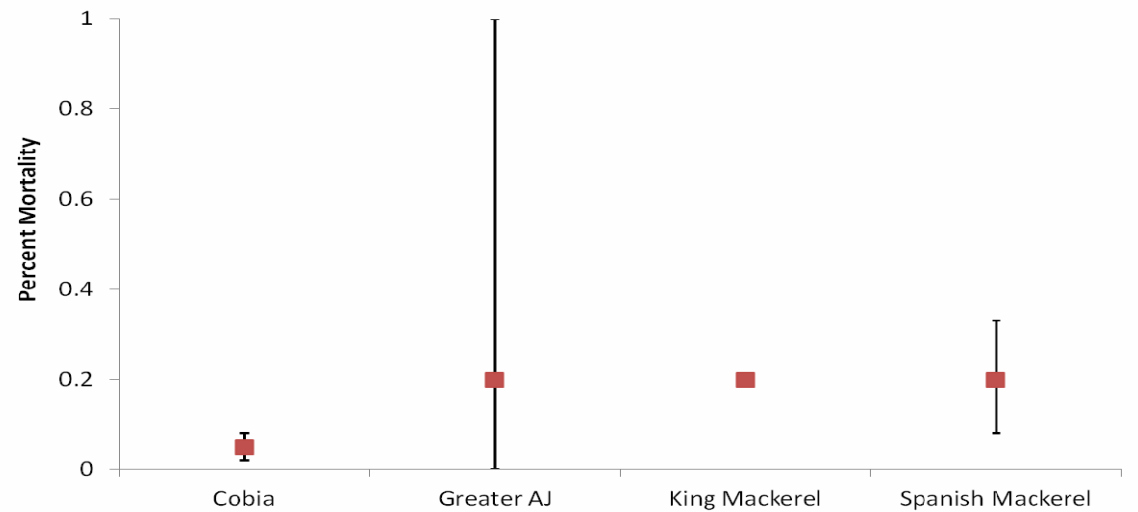
Inshore

- Red Drum
- Spotted Seatrout
- Striped Bass
- Snook
- Factors
 - Hook Type
 - Bait Type
 - Handling Time
 - Angler Experience
 - Temperature
 - Size



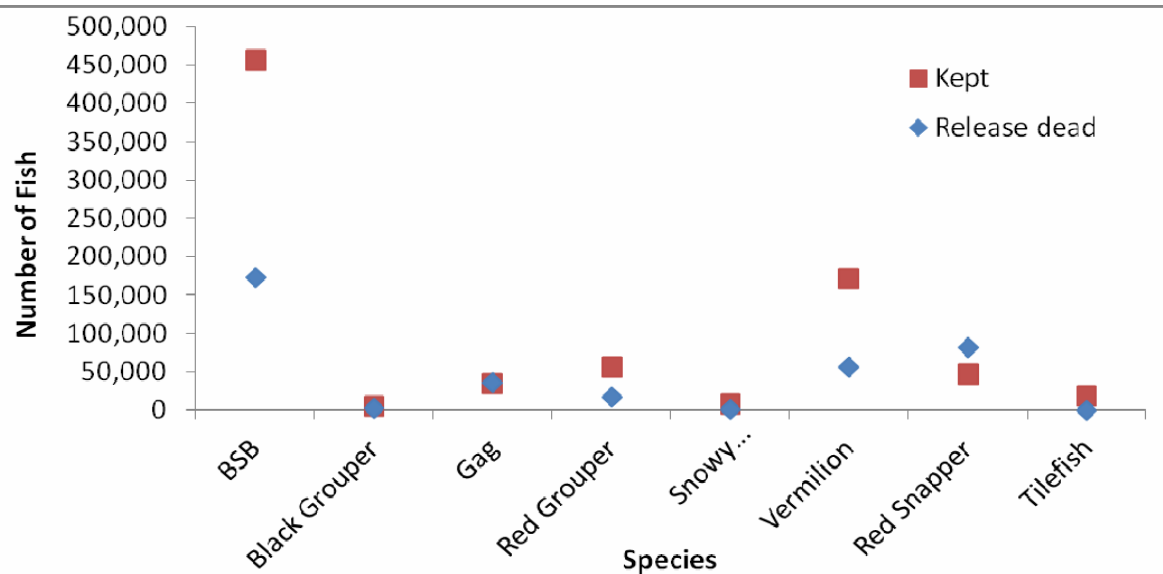
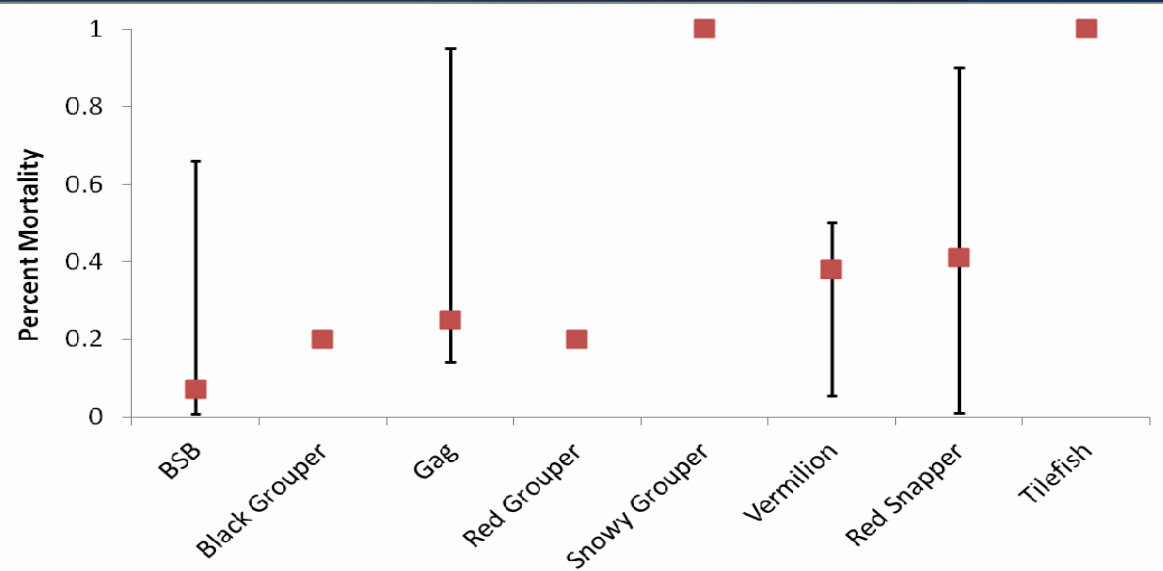
Pelagic

- Cobia
- Amberjack
- Mackerels
- Factors
 - Hook Type
 - Bait Type
 - Fighting Time
 - Handling Time
 - Predation
 - Size



Reef Fish

- Sea Bass
- Grouper
- Snappers
- Tilefish
- Factors
 - Hook Type
 - Fighting Time
 - Handling Time
 - Barotrauma
 - Temperature
 - Size

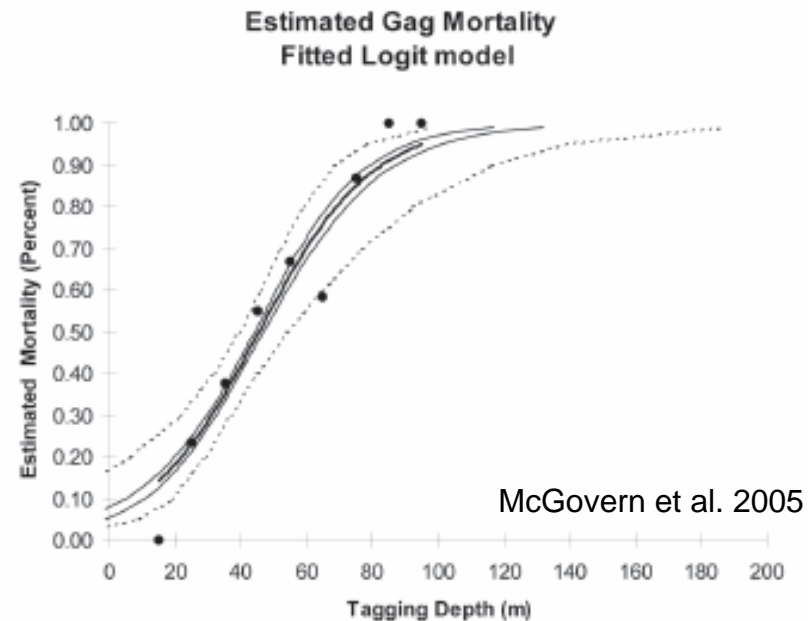


Future Research

- Estimate Effect of Regulation Changes
- Does Venting Help?
- Other Methods to Reduce Effects of Barotrauma
- Other Factors



<http://catchandrelease.org/resources.shtml>



Outreach

- Education
- Pamphlets
- Encouraging Opportunities

Ethical Angling A Guide to Responsible Fishing



VISITFLORIDA.COM



Deep Dropping

Published December 20, 2011 An increased number of recreational fishermen are trying out this commercial fishing tactic – enjoying challenging methods and impressive results.



FLORIDA SEA GRANT
Science Serving Florida's Coast



Some Venting Tools Available Today

To maintain healthy populations of popular game species, every fisherman is responsible for carefully handling fish that are released so they can survive, spawn, and perhaps be caught again. Reef fish such as red grouper, gag, and snapper may require venting to be able to swim back to safe habitat depth and avoid surface predators.

If a fish is bloated and floats, or if the fish's stomach is distended out of the mouth, the fish should be vented.

A sampling of venting tools is shown to illustrate features and components. The tools are not displayed to scale. Approximate retail price is given when available. No manufacturer endorsement is intended or implied.



Florida Sea Grant/Novak Venting Tool Kit
Retail: \$25.00
<http://www.arcdehooker.com>
(877) 411-4272 (toll free)
info@arcdehooker.com

Tool that Florida Sea Grant and Mote Marine Laboratory developed about 10 years ago; ARC developed kit for storage/disposal and marketing



SnapperSaver
Retail: \$67.00 + S&H
<https://www.shop.snappersaver.com>
sales@snappersaver.com

Prototype shown; new models anodized in red, blue and gold; protective stop button added on production line models; also features a dehooker.

See more on other side

Questions

