



MARYLAND DEPARTMENT OF NATURAL RESOURCES

Snapping Turtle Management in Maryland

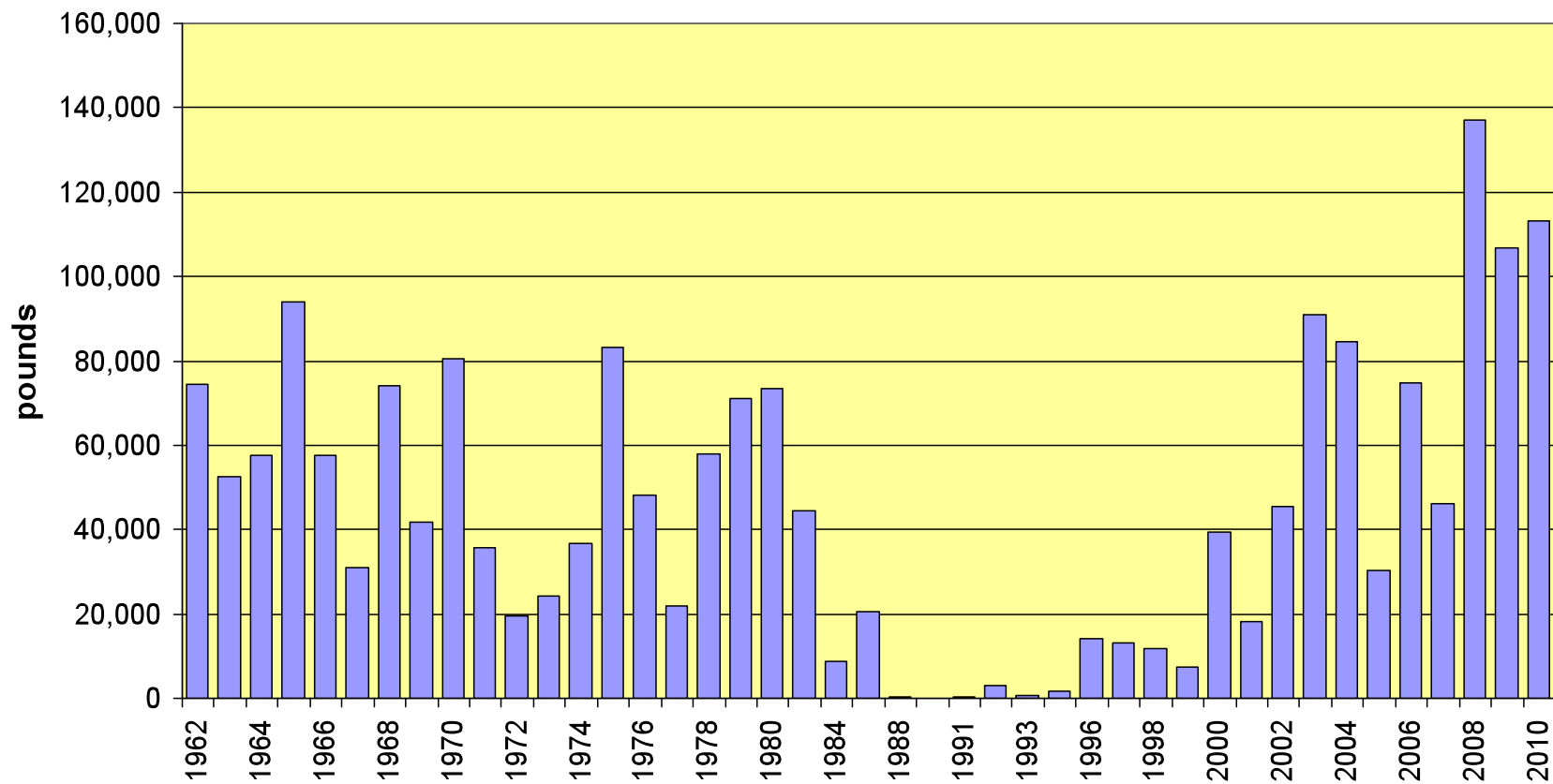
Goal-Driven Collaboration within a Workgroup **Rick Morin** **September 2010**



History of the Turtle Fishery

- Used as food by Native Americans in Chesapeake Region
- Used in colonial America by settlers and slaves
- Recorded commercial activity in live snapping turtles in 1873 (Cope)
- Fishery unmanaged for next 100 years
- Earliest regulations were county season limits and gear restrictions to prevent piercing any part of the turtle
- Increased international demand 1990's to present
- Agency authorized by enabling legislation in 2007 to develop regulations to manage snapping turtles
- Formation of snapping turtle workgroup 2007
- Interim regulations 2008
- Permanent regulations 2009

Harvest Reports to Fisheries Service





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Options when knowledge is limited

Allow status quo

Ban all harvest

Consider alternatives for sustainability that allow a limited fishery based on science



Going Beyond Informed Consent*

- Inclusion of stakeholders
- Education of harvesters without lecturing
- Honesty about what we know and don't know
- Partnerships in collection of data
- Spirit of cooperation and collaboration
- Willingness to listen and compromise
- Open Meetings

* Informed Consent: "The grudging willingness of opponents to "go along" with a course of action that they actually are opposed to" – Hans Bleiker, 2008.



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Formation of Snapping Turtle Workgroup

Composition:

- MD DNR Fisheries Service, co-chair
- MD DNR Wildlife and Heritage Service, co-chair
- MD Natural Resources Police
- Towson University
- University of Maryland UMCES, Chesapeake Biological Laboratory
- National Aquarium in Baltimore
- Chesapeake Bay watermen, MWA
- Mid-Atlantic Turtle and Tortoise Association
- Conservation International/IUCN
- Seafood Dealer, Turtle DeLuxe
- Aquaculture, R&R Aquafarms
- Nuisance Wildlife Control Operators and Maryland Trappers Association

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2007 Workgroup Recommendations

- Establish interim 9.5" minimum size limit
- No closed season
- Data collection - research highly recommended
- Recreational take possession limit
- Limits on pets and personal use
- No sale with nuisance permits
- No limited entry
- Clarify existing regulations: specify tidal harvest only
- Increase enforcement
- Continuation of the workgroup



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Interim regulations in place for 2008:

- Size limit: 9.5" minimum CCL
- Commercial license required to harvest
- New Snapping Turtle Permit Required
- Harvest Reports Required
- Harvest allowed in tidal waters only

Effects of Size Limits

P. Cain study, 2008 Nanticoke R

Size Limit CCL inches	Size Class Protected	% Females Protected	% Males Protected	% M + F Protected
8.5	0 - 8.49	4%	5%	5%
9	0 - 8.99	8%	7%	8%
9.5	0 - 9.49	13%	12%	13%
10	0 - 9.99	17%	18%	18%
10.5	0 - 10.49	40%	28%	31%
11	0 - 10.99	63%	37%	44%
11.5	0 - 11.49	83%	50%	59%
12	0 - 11.99	90%	59%	67%
12.5	0 - 12.49	96%	67%	75%



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2008 Goals and Objectives

Commercial Fishery Goal:

"We want a sustainable fishery"

Scientific Subcommittee Goal:

"We have an obligation to protect the resource and manage for all values"

Scientific Objective:

"Protect at least 50% of mature tidewater females and 100% of non-tidal snapping turtles"

2009 Regulations

- Commercial fishery regulations:
 - 11" min CCL
 - Tidal water harvest only
 - Harvest permit required in addition to commercial license
 - Report requirements
 - Gear restrictions & float requirement
- Personal use and pet regulations:
 - Possession limit of 1
 - Gear restrictions

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Why an 11 inch size limit?

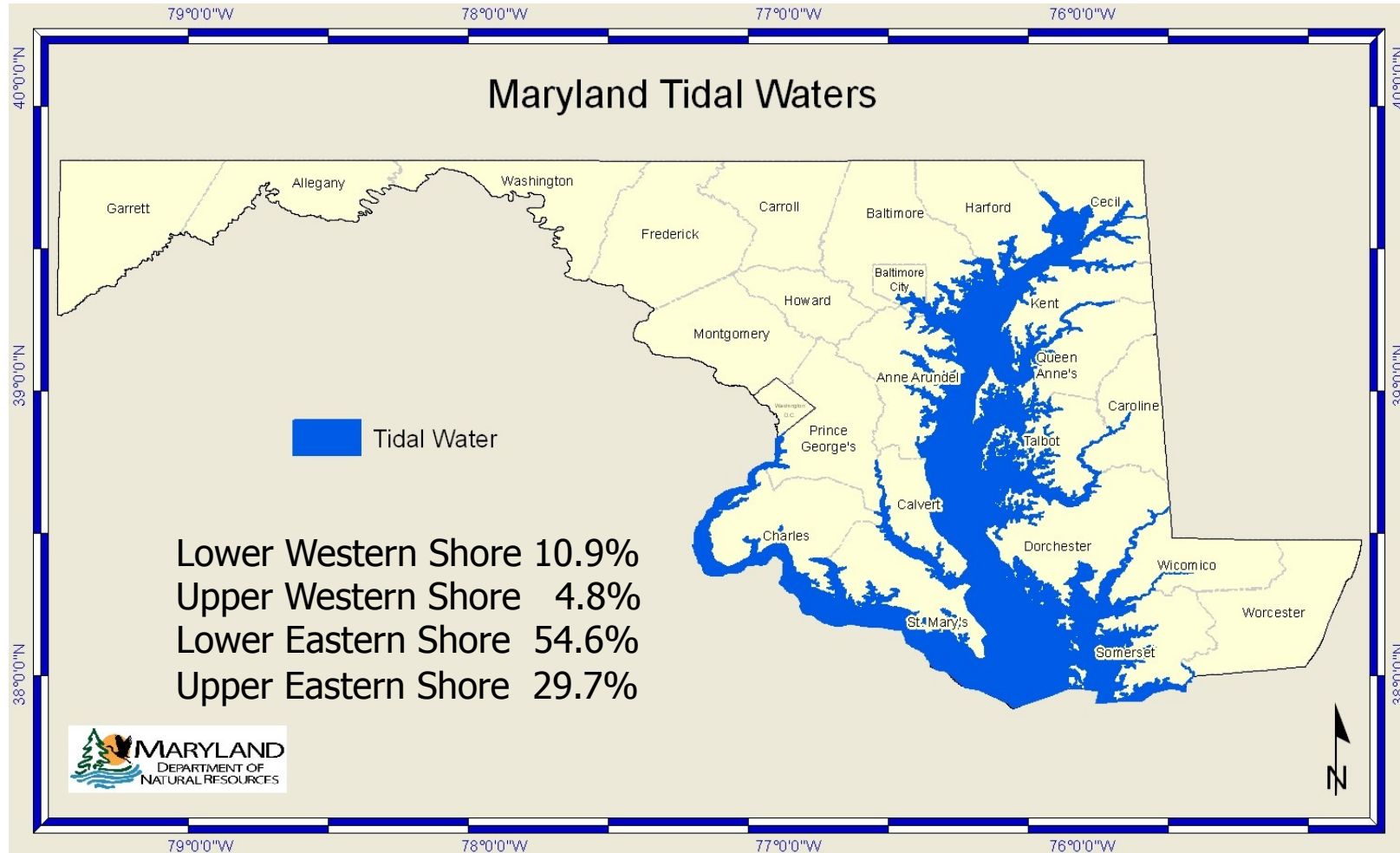


Why Tidal Harvest Only?

Consistent with commercial fishing regulations & licensing
Allows for turtle refuge in non-tidal waters



Where are snapping turtles harvested? (from 209 harvest reports)



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STOP

If you have any turtles besides snapping turtles, or snapping turtles that are not clearly 11 inches or longer measured as shown below.

LEAVE NOW!!

and don't return until these conditions are met.



MEASURING A SNAPPING TURTLE CURVED CARAPACE LENGTH

Measure the length of a snapping turtle along the curvature of the carapace (top shell) with a flexible tape measure that conforms to the snapping turtle's shell from the nuchal scute (the scute directly behind the turtle's head) to the base of the notch where the two most posterior scutes meet

The Management

Permitting and Compliance

Year	Permits Issued	Permit Compliance	Report Compliance
2008	55	75.9%	83.6%
2009	115	98.1%	90.4%
2010	78	100%	92.3%

Summary of the Harvest Reports

Year	Harvesters	Pounds Harvested	Top 6 Harvesters
2008	29	137,040	87,913 (64.2%)
2009	52	106,726	64,817 (60.7%)
2010	43	113,245	65,349 (57.7%)

Mean Turtle Weight by Month

	2008 (n)	2009 (n)	2010 (n)
April		15.0 (910)	14.6 (2154)
May		12.3 (3773)	14.9 (4240)
June		13.1 (2244)	13.2 (1388)
July	13.7 (612)	18.0 (579)	
August	13.1 (1062)	18.4 (132)	
September	11.7 (148)		



Future Needs – Where Do We Go From Here

- **Develop method(s) to define and assess overfishing (CPUE).**
- **Establish regional management relationship with neighboring states.**
- **Require continued snapping turtle management process.**
- **Identify funding sources for research needs.**
- **Include snapping turtle fishery in discussion about latent effort and limited entry fisheries.**



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Dedication

Stephen Leonard Cohey. 1954-2010. Chesapeake Bay Waterman and original member of the Snapping Turtle Workgroup.

Acknowledgements

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