# It's no fish ye're allocating, it's men's lives\*

Madeleine Hall-Arber Stanford Fisheries Forum September 2010

Apologies to Sir Walter Scott\*

## Management Goals/Vision

- Economic efficiency
- Community stability
- Community development
- Rebuilding stocks
- Bycatch mitigation
- Ecosystem health and sustainability
- Optimizing target catch
- Stakeholder input and equity
- Job growth
- Capacity building
- Capacity reduction



## Building blocks of management

- Limited access system, then allocations of:
  - Days-at-sea (DAS)
  - Quota
  - Catch shares
  - Territorial Use Rights in Fisheries (TURFs)
  - Trap tags
  - Other

- Criteria for allocations:
  - Catch landings/history
  - Preservation of historic ports
  - Shoreside infrastructure
  - Conservation performance/goals
  - Equity
  - Management costs
  - Management certainty
  - Economic net benefits
  - Economic impacts
  - Enforcement
  - Jobs
  - Capacity
  - Opportunities for new entrants

## N.E. groundfish allocations based on "history"

#### History=

- Quantity of fish landed
- Numbers of days a minimum amount was landed during a specified time period
- Briefly considered vessel size/capacity
- Briefly considered equal allocations



#### Implicit meaning of "history"

- Acknowledgement that individual's, company's or family's financial investment is important
  - Past performance (landings) should be the basis for continued access
- Rewarded are those who have landed the greatest quantities or spent the most time at sea
  - Most skilled and/or largest vessels? Greediest?

Understanding the implicit meanings behind the management criteria is critical to meeting management goals. The goals should reflect both national standards and stakeholders' values and/or vision of the future.

#### Data affects criteria and strategies

- Vessel owners allocated history; crewmembers not
  - —Irrespective of their personal participation
    - N.E. crewmembers are not tracked, nor are catch and crewmembers linked (unlike ships' logs in the 1800's)
    - Crewmembers have no means to document their fishing history, so no basis for allocation
    - Captains in Alaska's crab fishery were allocated a very small percentage of IFQ based on their personal participation history; now crews in Alaska are licensed so they can document their activity

#### Allocations and inequity

- Inshore fishermen, especially Downeast Maine, are disadvantaged due to the lack of cod during the relevant years—Should initial allocations be supplemented later?
- Severe trip limits on cod were in place during the selected time period for calculating history
- Some of the richest grounds were purposely chosen for closures (to reduce effort/mortality)
  - Inshore/small boat fishery disadvantaged
- DAS led to more inshore fishing and focus on schooling fish
- Those who fished on other species (to help recovery) lost access to groundfish

#### New England's Proudly Diverse Fleet

- Mobile and fixed gear
- Multitude of species
- Differences in scale
- Differences in practice
- Differences in ethnicity
- Differences in ages



#### Social Science to the rescue

- Interdisciplinary, participatory research is the key
  - Anthropology/sociology/political ecology consider the "back story"
    - Social and political context (e.g., community structure & dynamics)
    - Behavior patterns
    - Trends
    - Values
    - Adaptive strategies

#### Methodology

- Structured interviews
- Key-respondent interviews (semi-structured)
- Participant observation (fieldwork)
- Focus groups
- Oral histories

One challenge is proving that qualitative data are reliable; the other is knowing how to use the data for more effective management decisions.

## Tools for weighing the data

- Models
  - Mapping—visualizing the geo-spatial context
  - Social networks
  - Well-being/happiness indicators
  - Cultural models
- Active participation of stakeholders
  - Collection of difficult to obtain data (e.g., LEK)
  - Groundtruthing
  - Collaboration (inclusion, leadership and vision)

#### Why should you care about values?

- Common goal: Economic viability for fleet and shoreside infrastructure
- Definition of viability differs according to values:
  - Maximizing jobs
  - Maximizing wealth
  - Sustainability
  - Life style



Attitudes and values (e.g., equity) are not easily quantified, yet are important: "[Father] taught us there was a right way to fish and a wrong way to fish."

## Avoiding unintended consequences



- Fishing practices
- "Way of life"
  - Family and women's roles
- Community
- Waterfront access

## Fishing practices

- Corporations and vertical integration
  - Outside investors (potentially foreign) unfamiliar with local values
  - Armchair fishermen
  - Safety concerns



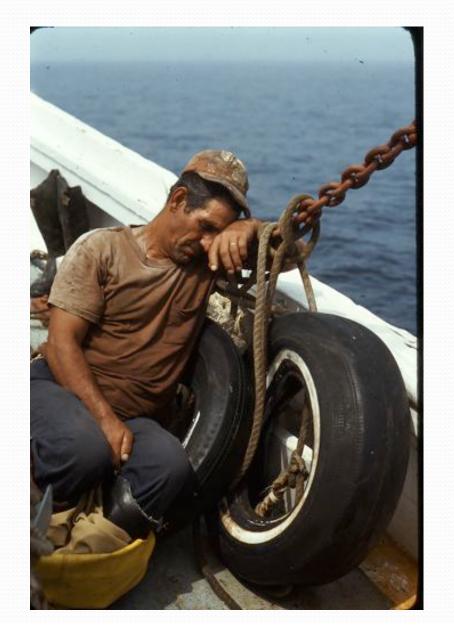
## Way of Life



The cost of permits—leasing or buying—makes it difficult to "work your way up."

#### Way of life

• We would go out, it would be 5, 6, 7 guys and we would be talking, telling jokes, playing cards. There was always 2 or 3 guys up constantly. Today, it's me and my son. If I am on watch, he is sleeping, or if he is on watch I am sleeping. You know, it is a whole different thing now to go fishing. I am beginning to hate it, for the first time in my life.



#### Waterfront access



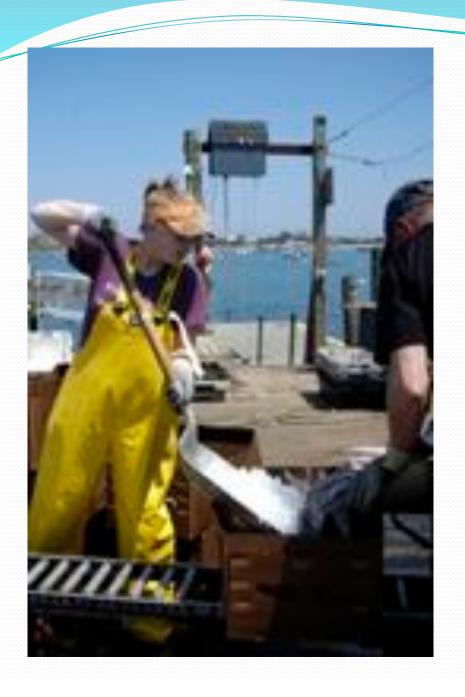


"Just this summer. . .the charter boats, they moved to Hampton Beach because they sold the whole Newburyport waterfront, they're going to build hotels and condominiums and everything else."

"And if we don't have a place to unload [the fish], then all our sacrifices are lost."

#### Allocations rely on assessments

- Accurate assessments are necessary
  - Currently, not sufficiently fine-scaled
  - Not frequent enough
- Stock assessments rely on landings (in part)
  - Eliminating the network of small boats limits the information derived from multiple landings reflecting catches from a variety of sites



#### Future?

- Commercial fishing is the only source of fresh fish to eat for most people
- Diversity in the fleet has advantages, better mimics ecosystem processes

## Acknowledgements

