



The Human Side of Spiny Lobster – Situation Assessment of the Commercial Fishery

May Lehmensiek^{a*}, Lauren Zitzman^a, Carly Hannah^a Kai Lorenzen^b

^aFlorida Fish and Wildlife Conservation Commission,

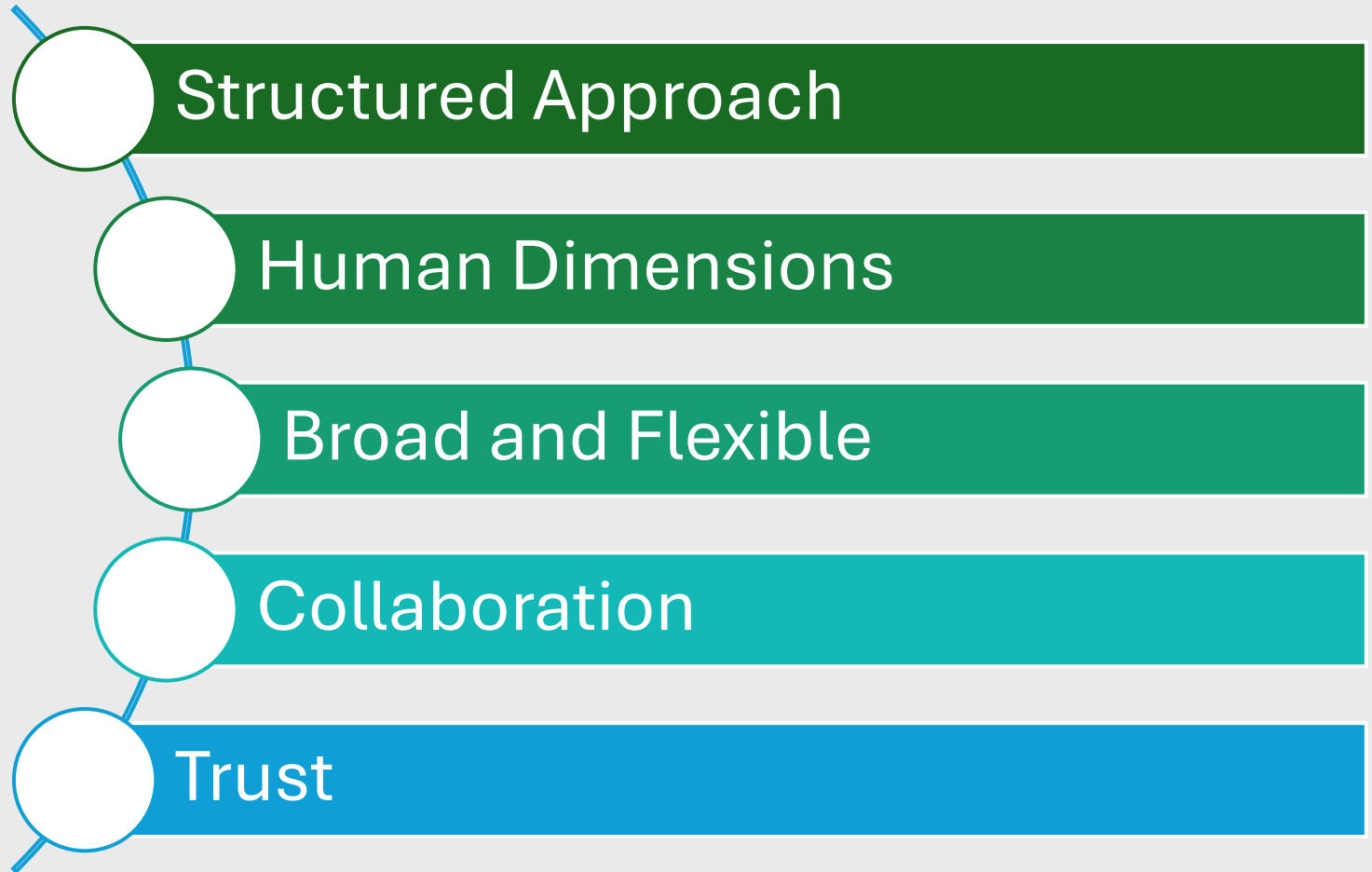
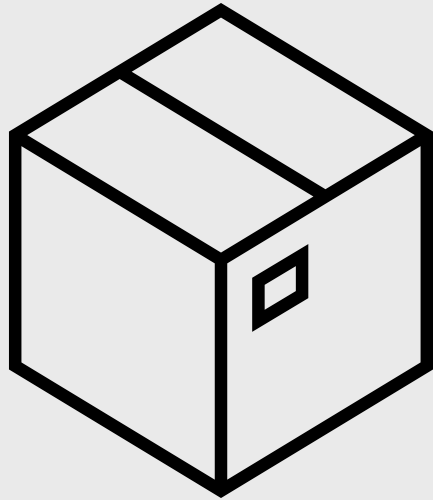
^bUniversity of Florida

*may.lehmensiek@myfwc.com

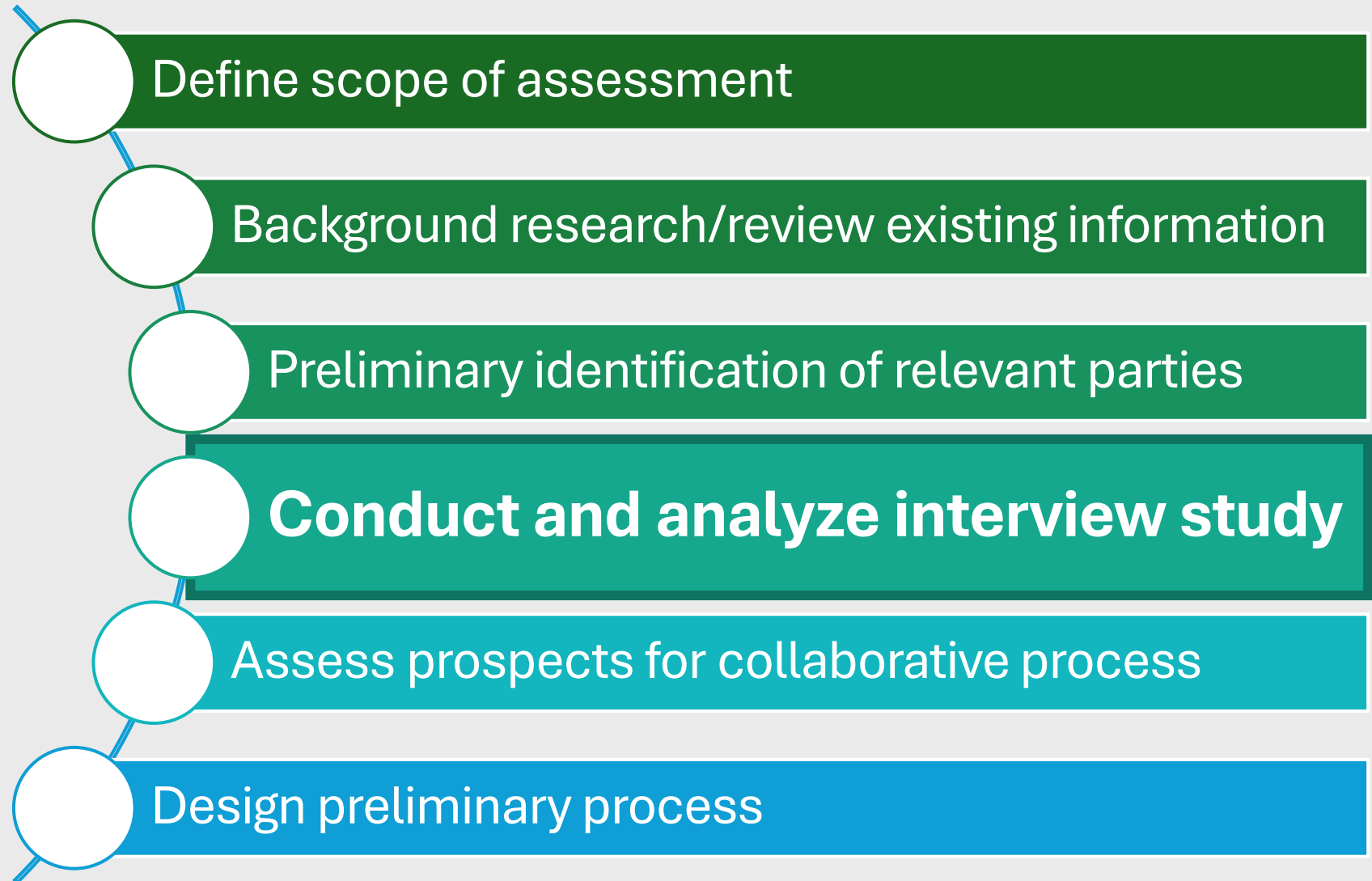
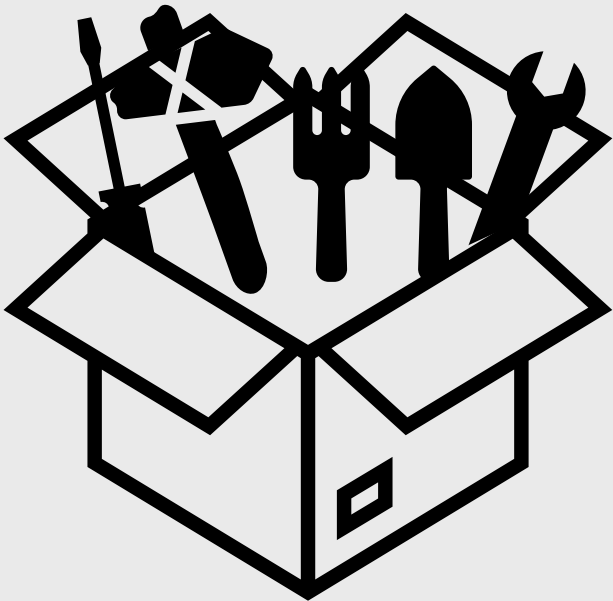




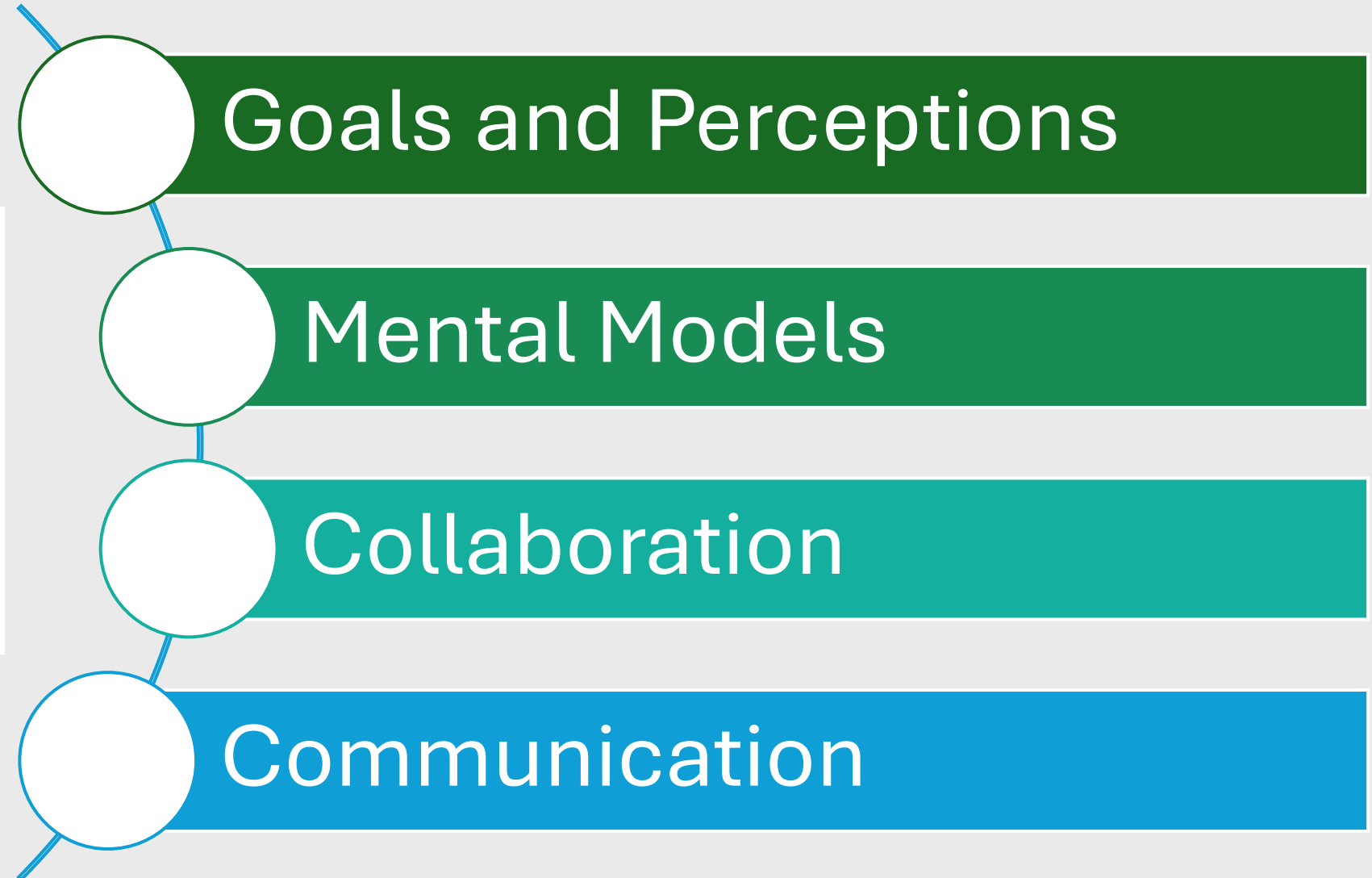
Situation Assessment to Understand Fisheries Management Situations



Situation Assessment for Fisheries Management



Meaningful Research for our Shared Future in the Keys



Commercial Spiny Lobster Fishery



Economically (and culturally) important fishery



Many internal and external pressures



The Situation



Scientists: Want to do meaningful science.
Concerned about efficiency and overcapitalization
of the fishery.



Managers: Sympathetic to fishers' needs but
have limited decision-making space



Fishers: "We are in a pickle and need help"- Not
sure managers and/or scientists can help.

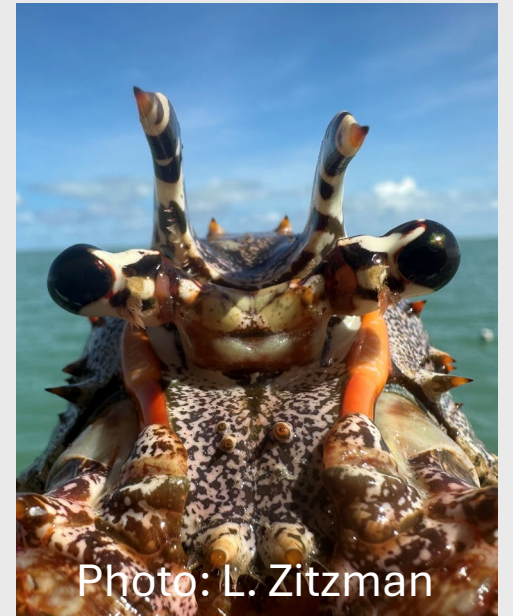
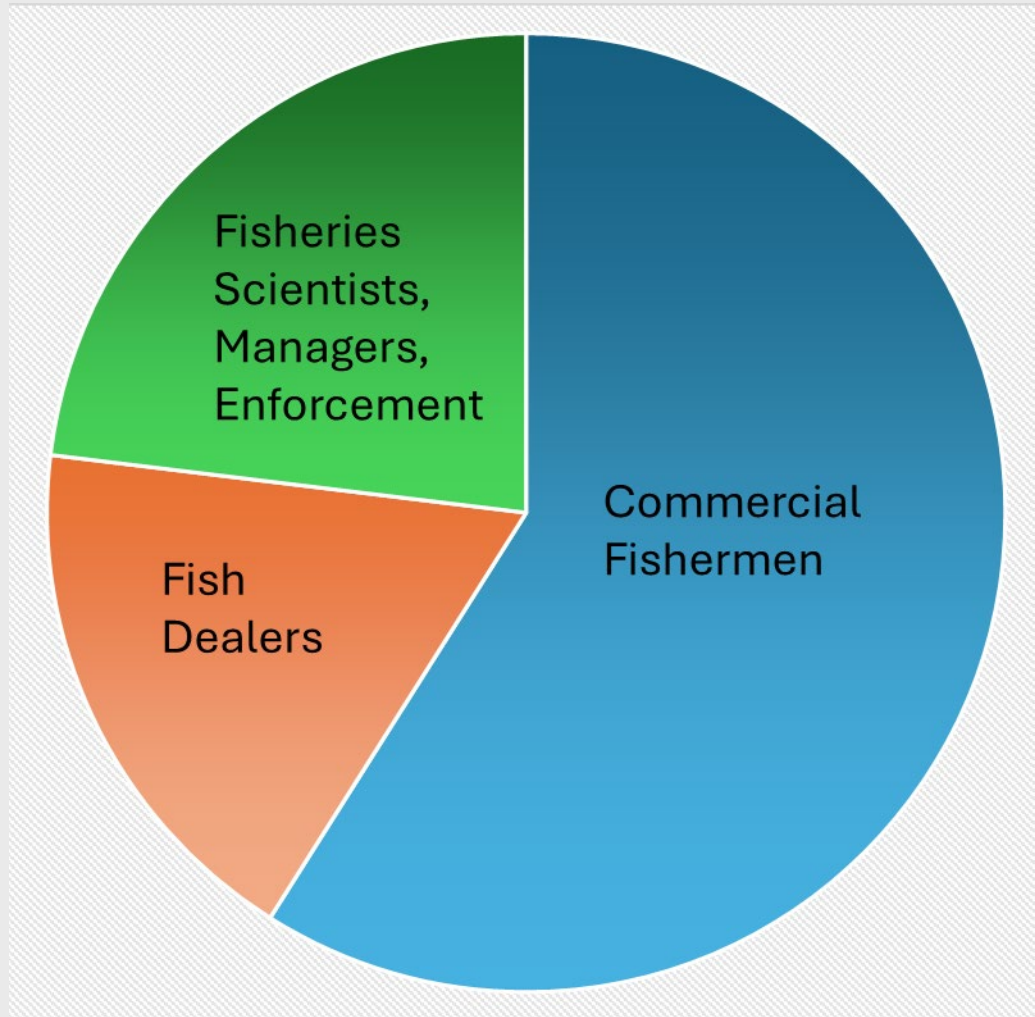


Photo: L. Zitzman

Interview Study – 39 Interviews



- Connection to the fishery
- Perceptions of power within the fishery system
- Issues and concerns
- Hopes for the future
- How they would like to be engaged



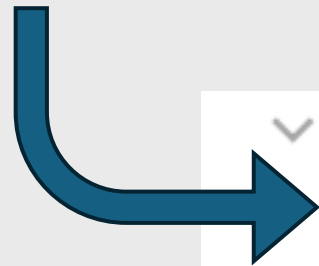
62 hours of recorded interviews
-> 3808 pieces of coded information



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“The fishers don't really distinguish between the scientists and the regulators. Whenever he gets a notification, it is about new regulations and he assumes that the regulations are the result of studies by biologists.”

SK Interview 18



- ▼ ● 🔍 Research they would like to see
 - 🔍 Concerned that research leads to more regulations
 - 🔍 How to improve water quality?
 - 🔍 Migration pattern
- > ● 🔍 PL/Recruitment Index (+)
- 🔍 Stock assessment/ MSY
- 🔍 Benthic monitoring/change over time (+)



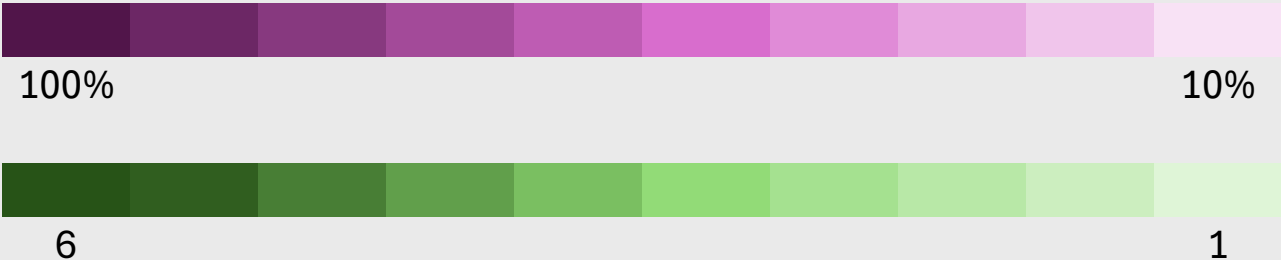
Who has power?



	Fishermen		Fish Dealers		Managers & Scientists	
	% of interviews	# / interview	% of interviews	# / interview	% of interviews	# / interview
Buyers/Market						
FWC						
Government, Politics						
Fishers and associated groups						
Mother Nature						
Public						
Recreational Sector						
Crew						
Suppliers (Diesel, materials)						
Fisheries management						
Scientists						

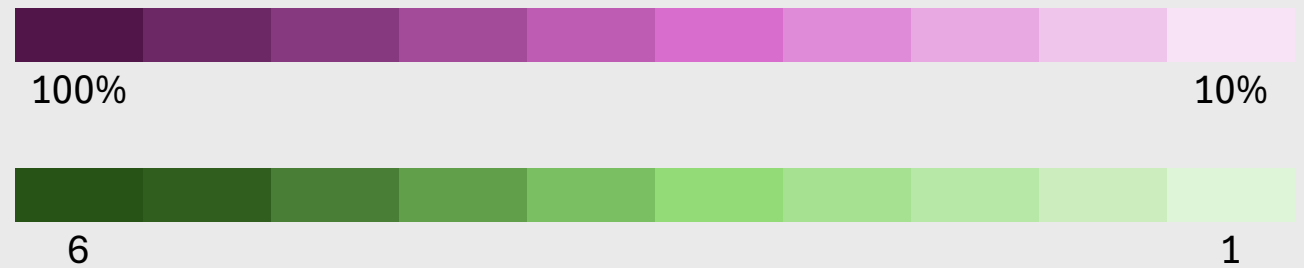


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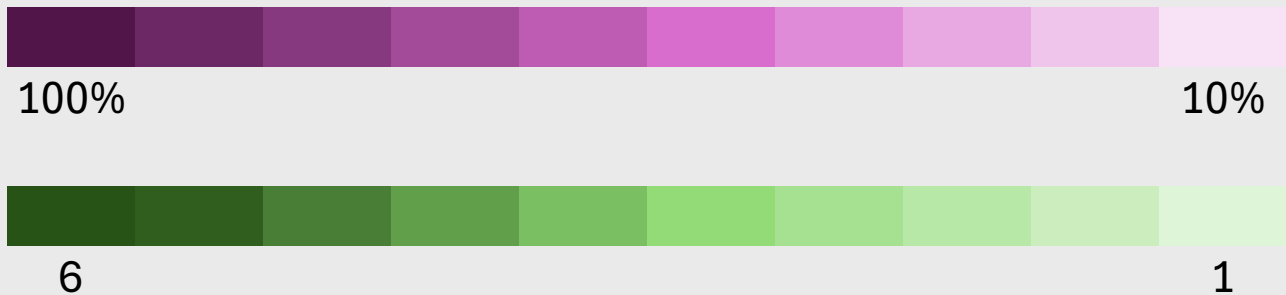
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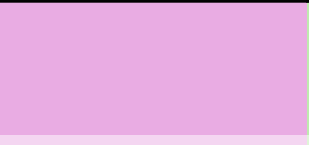
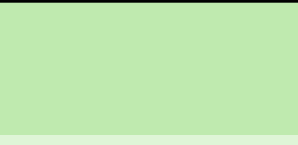
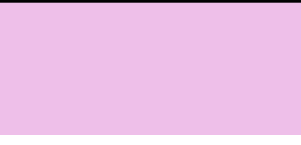
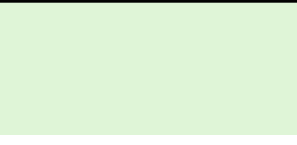
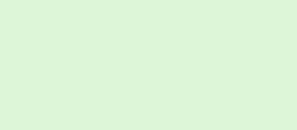
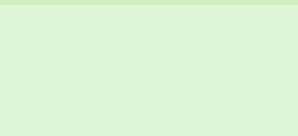
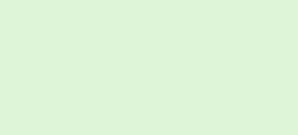


	Fishermen		Fish Dealers		Managers & Scientists	
	% of interviews	# / interview	% of interviews	# / interview	% of interviews	# / interview
Buyers/Market	100%	6	10%	6	10%	6
FWC	10%	1	10%	1	10%	1
Government, Politics	10%	1	10%	1	100%	1
Fishers and associated groups	10%	1	10%	1	100%	1
Mother Nature	10%	1				
Public	10%	1	10%	1	10%	1
Recreational Sector	10%	1			10%	1
Crew	10%	1	10%	1	10%	1
Suppliers (Diesel, materials)	10%	1	10%	1	10%	1
Fisheries management	10%	1	10%	1	10%	1
Scientists	10%	1			10%	1



High influence



	Fishermen		Fish Dealers		Managers & Scientists	
	% of interviews	# / interview	% of interviews	# / interview	% of interviews	# / interview
Fish house or buyers						
The price of lobster						
Chinese Market						
Mother Nature						
FWC						



High influence



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Fish house or buyers						
The price of lobster						
Chinese Market						
Mother Nature						
FWC						



Concerns

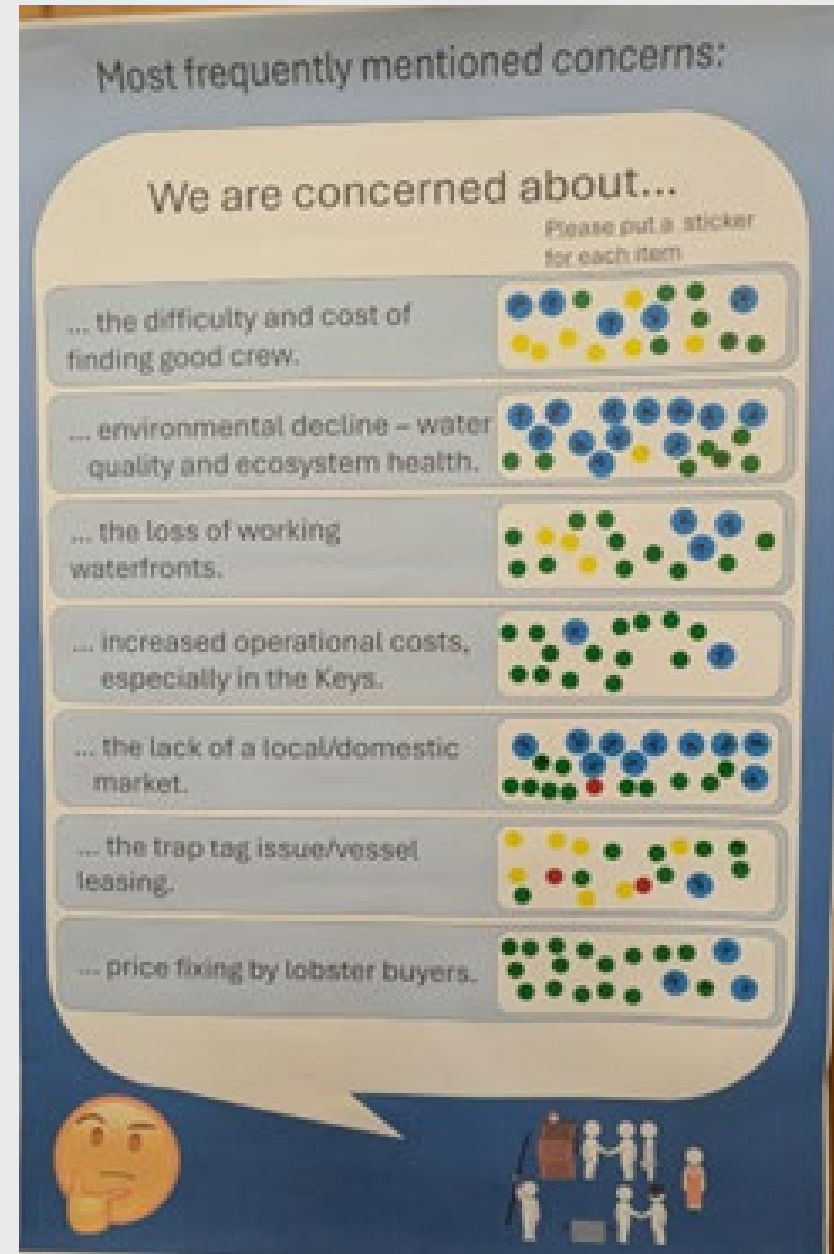


	Fishermen		Fish Dealers		Managers & Scientists	
	% of interviews	# / interview	% of interviews	# / interview	% of interviews	# / interview
Gentrification/tourism						
Market and economics						
Environmental degradation						
Mangement actions						
Fishery demographic change						
Finding good crew						
Trap Robbing						



Shifting Concerns

- Interviews March 2024 – May 2025
- Event with commercial fishermen in July 2025
- Most important concerns:
 - The lack of a local/domestic market.
 - Environmental decline – water quality and ecosystem health.





Research Needs



	Fishermen		Fish Dealers		Managers & Scientists	
	% of interviews	# / interview	% of interviews	# / interview	% of interviews	# / interview
Migration Pattern						
Stock Assessment/MSY						
Recruitment Index						
Origin and movement of larvae						
Benthic monitoring						

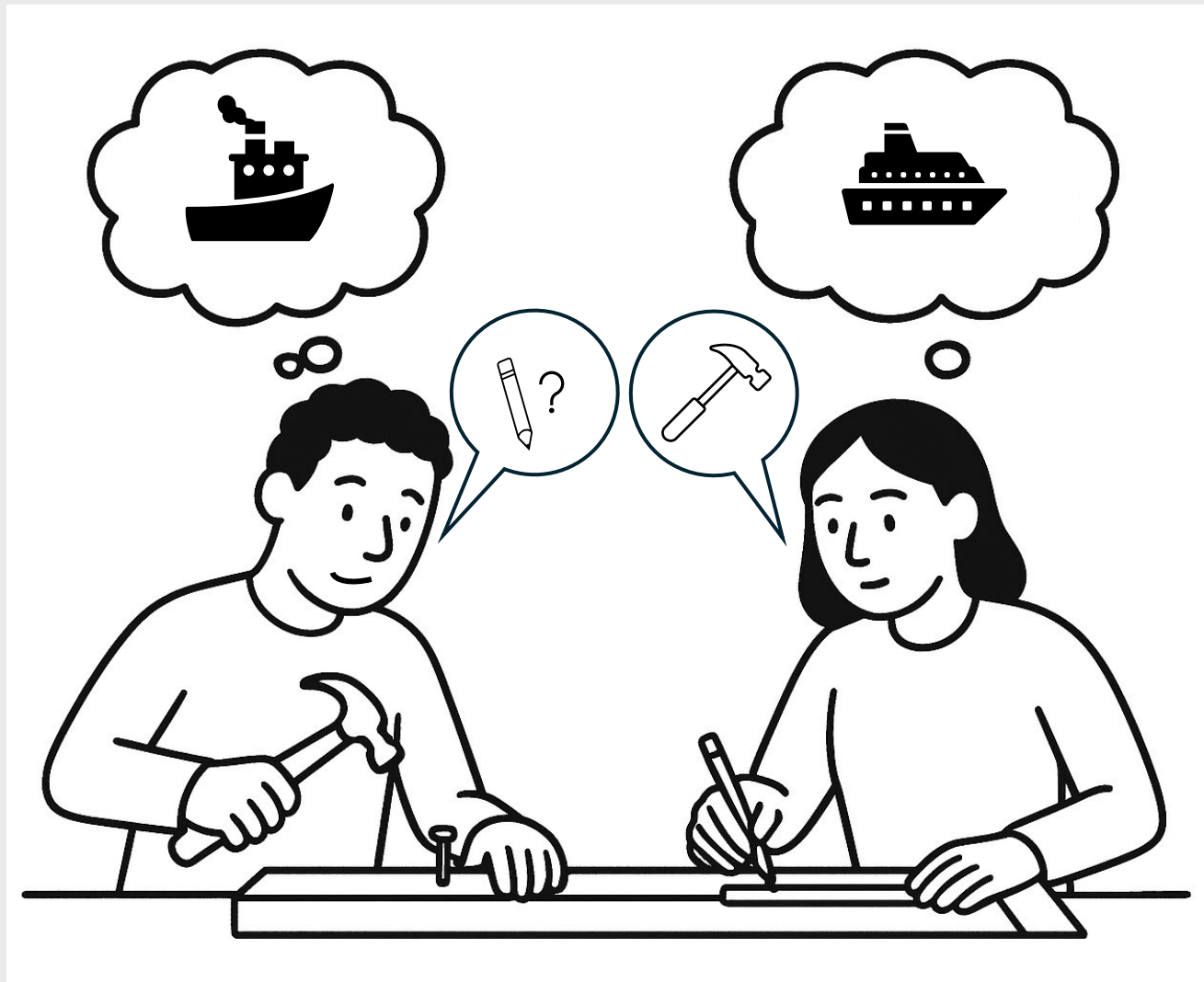


Our Shared Future in the Florida Keys

- Different groups – different goals
- Different mental models
- Collaboration
- Communication



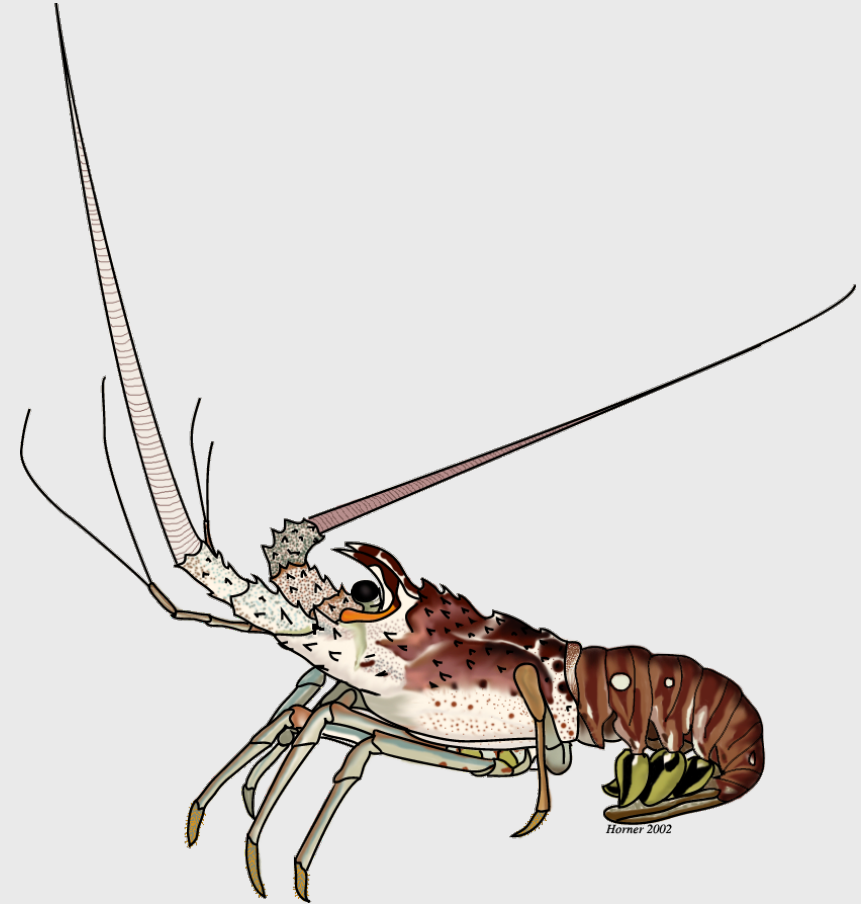
Our Shared Future in the Florida Keys



Ask me questions and
buy local seafood!



A special THANK YOU to the fishermen,
scientists, managers, and fish dealers
who shared their time and insights with
us!!





Mental Models



Mental Models

- Our understanding of how the world works- help us make sense of a complex world
- Based on our past experiences, knowledge, what we have seen in the past
- E.g. lots of fish whenever I go fishing = mental model: fish are quite abundant. Gulf-wide stock assessment must be wrong when they say fish pops are declining



Situation Assessment

- Structured approach to analyzing a natural resource management situation with particular focus on human dimensions
- Broad and flexible approach drawing on a variety of foundational concepts and methodologies
- Not dissimilar to, for example, a needs assessment prior to starting a project.



Why do a Situation Assessment?

- Can help us better understand natural resource management situations.
- Can help identify and design potential avenues for improving the situation, incl. collaborative processes
- Also serves to get to know the involved parties, build trust etc.