Workshop Paraty, RJ, 08-09 Dec 2010

Fish ethnoecology in the Paraty Bay, southeastern Brazilian coast



Research team:

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Main goals

- ➤ Analyze the fishers' local ecological knowledge (LEK) about main commercial fishes
- > Compare fishermen and fish vendors ('peixarias')
- Compare fishermen from different ages

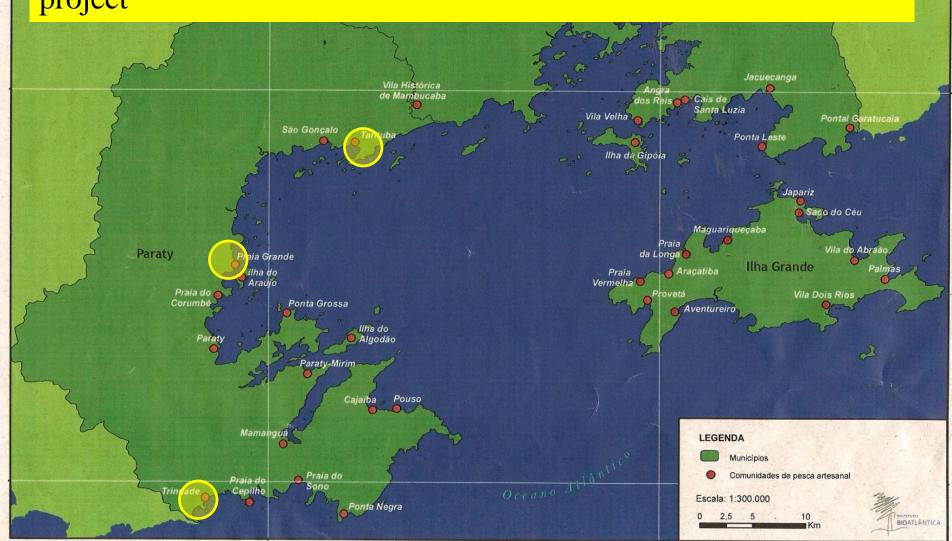
Fishers' local ecological knowledge
Renato Silvano
Priscila Lopes

Local knowledge and the choices of conservation areas in Paraty
Priscila Lopes

Same questionnaire and same database!

Study site

- > Three fishing communities: Trindade, Tarituba, Praia Grande
- ➤ Same communities of the fish landing survey and Priscila's project



Five commercial fishes:

Cavala

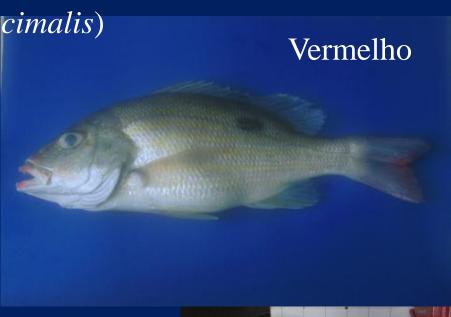
Grouper (Garoupa) (Epinephelus marginatus)

Mackerel (Cavala) (Scomberomorus spp.

Snook (Robalo) (Centropomus undecimalis)

Snapper (vermelho) (Lutjanus spp.)







Enchova (*Pomatomus saltatrix*)



Compare with results of previous surveys on fishers' LEK of this fish (Silvano and Begossi 2005, 2010, Silvano et al. 2006, Nunes 2010)

Methods

Sampling: interviews using standardized questionnaires

Topics of interest about the studied fishes: temporal patterns on...

Abundance

Changes on fish size

Diet

Seasonal occurrence

Reproductive season

Migratory behavior

Sustainability or overfishing

Environmental changes: climatic changes?

When? Soon after this workshop, Dec 2010

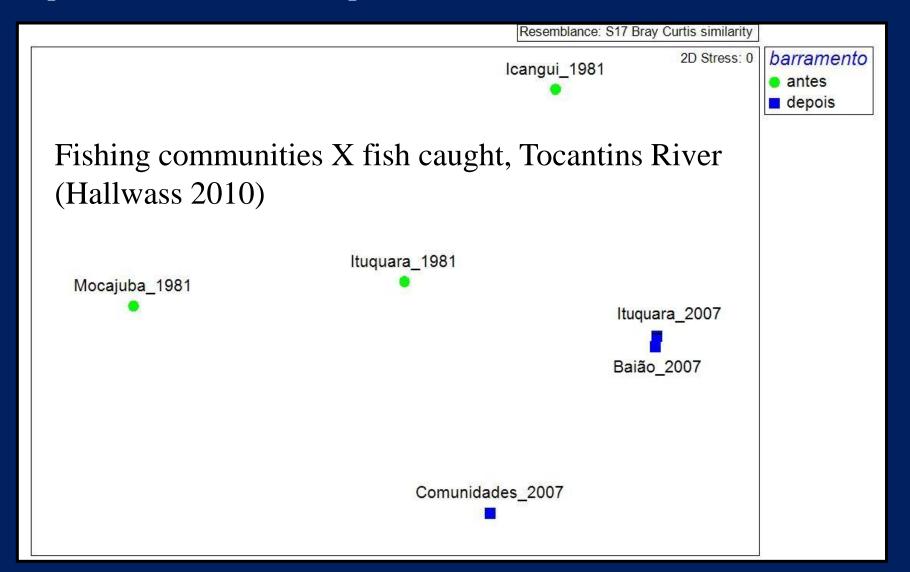
Stratified sampling: age categories of fishers (10 years fishing in the studied community, three to five fishers on each category)

Fishermen's age				
classes	Praia Grande	Tarituba Trindade Total		
18-30	0	0	7	7
31-40	4	4	6	14
41-50	3	5	1	9
51-60	2	8	7	17
61-70	1	2	0	3
71-80	0	0	0	0
81 and over	1	0	0	1
Total	11	19	21	51

- > Previous interviews from Begossi et al. 2010
- > Snow-ball sampling
- ➤ Include some other communities

Data analyses: multivariate analysis, NMDS or similar

Matrix: fishermen age categories X % of answers to selected questions for each fish species



Expected results

- Comparisons with information from the literature, fish landings and fish ecology surveys: hypotheses to be investigated
- Inputs to co-management
- Insights on temporal trends on fish abundance and behavior

Acknowledgements

- To IDRC for funding support
- To organizers Alpina Begossi and Shirley P. Souza
- To Robson and Vinícius for help with fieldwork (in advance)

• To you by your attention

