

Applying knowledge for better fisheries outcomes: a research perspective of working together

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Better management of fisheries requires

- A will from all groups to work together
- An awareness of the biology and ecology of fisheries
- Realistic and clear management goals in this context
- Strategies to achieve them

Better management requires information

- Information to support these strategies
 - Local customary knowledge
 - Local ecological knowledge
 - Information from research and science
- Making the right decisions based on information
 - Information imperfect
 - High variability
 - Complex relationships

THEME

Opportunities to share knowledge: Customary engagement in fisheries management processes

- Frameworks and processes incomplete
 - No clear road maps
 - Limited integration of resources or capability building for Maori
- Two common approaches
 - Dedicated processes (Mataitai and Taiapure)
 - Integrated process (Fisheries Plans)
 - Can include customary management of specific areas

EXAMPLE

Foveaux Strait Oyster Fisheries Plan

- Success - customary, commercial, and recreational partnership can work
- Strong foundations for partnership and Maori participation
- Bought about by crises

EXAMPLE

Strong foundations for partnership and Maori participation

- Tangata Whenua
 - Quota ownership
 - High participation in fishery
 - All customary catch from commercial vessels
 - High recreational fishery participation
 - Recreational catch from commercial vessels
 - Recreational only areas
- Discrete stock





EXAMPLE

Crises

- 1986 disease event
 - Focused research effort
 - Information on population and productivity, and disease
- 2000 disease event
- Concerns over effects of fishing
- Engagement of partners in proof of concept Fisheries Plan

EXAMPLE

Foveaux Strait Oyster Fisheries Plan

- Critical elements of the success of this plan
 - Acknowledging that all partners want the same thing
 - Integrating customary, recreational, and commercial objectives
- Working together
 - Partners
 - Managers
 - Researchers



EXAMPLE

Working together

- Sharing knowledge
- Common goals
- Identifying the issues
- Developing strategies to overcome them
 - Integrating information
 - Evaluating how well the management measures are working

EXAMPLE

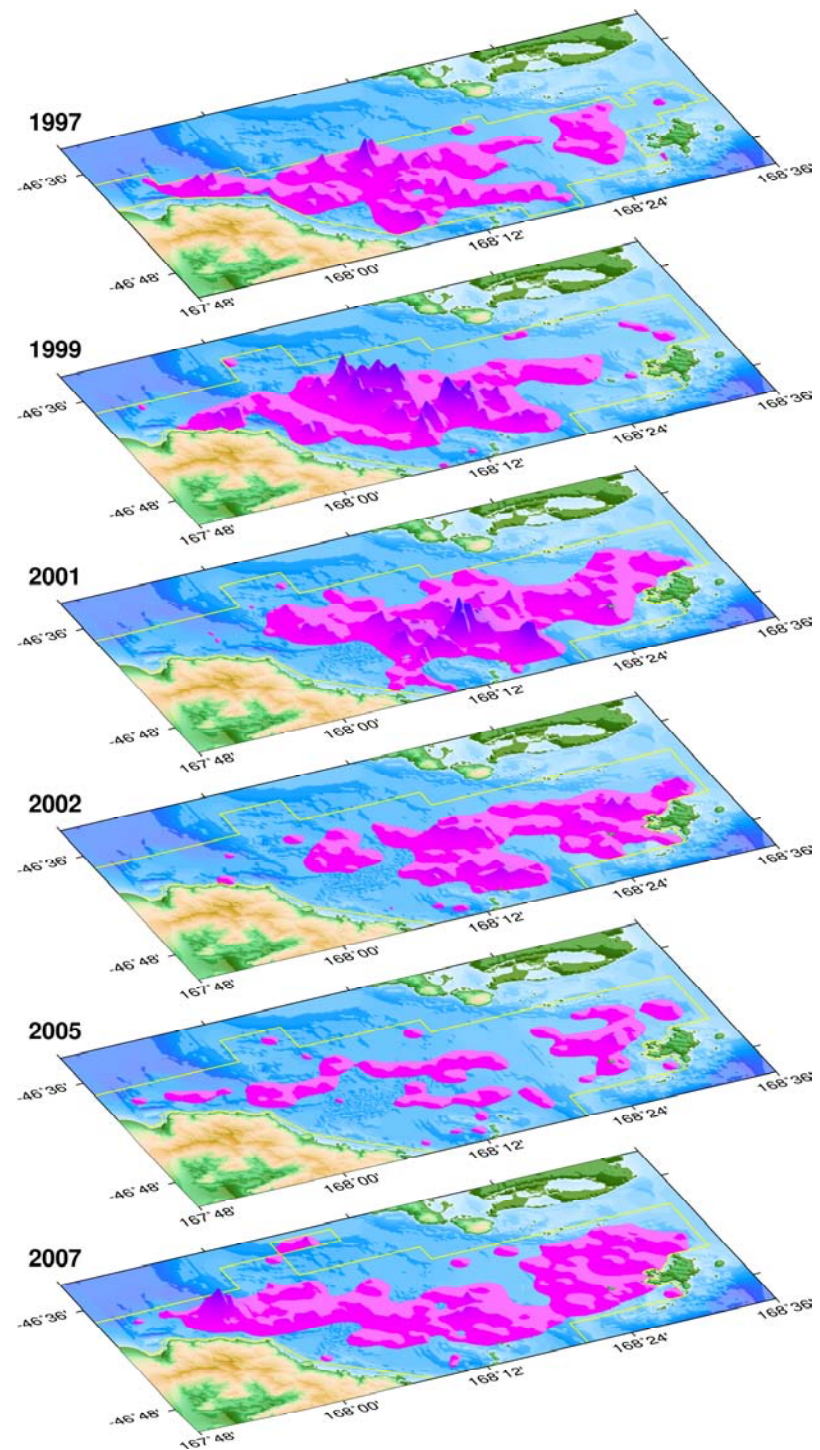
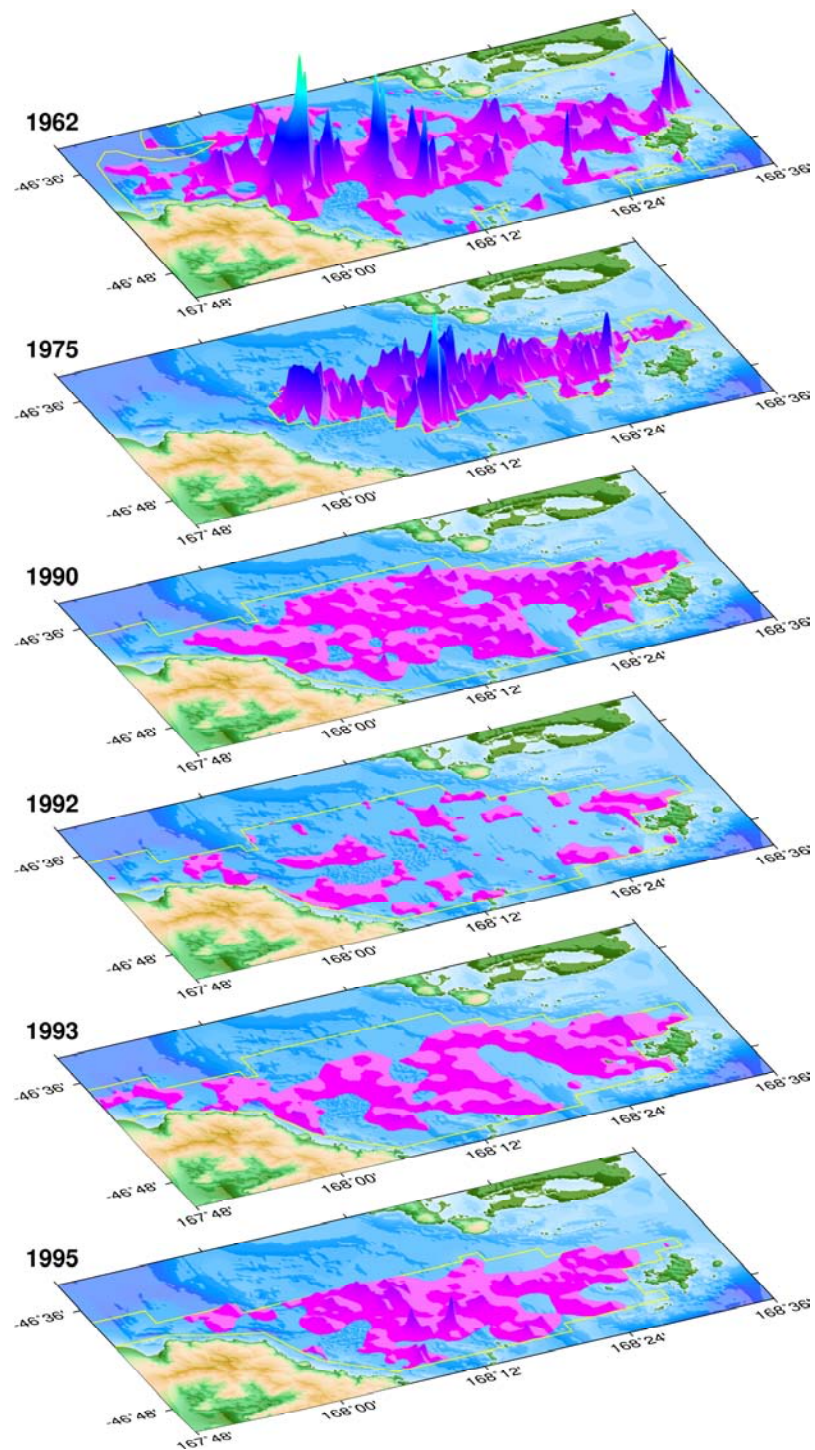
Partners' goals

- A fishery for the future – for our mokopuna
- A fishery with minimal harmful effects
- A fishery for all sectors – everyone has a fair share of this taonga
- A fishery based on the 'right' decisions, with all groups sitting around the table together

EXAMPLE

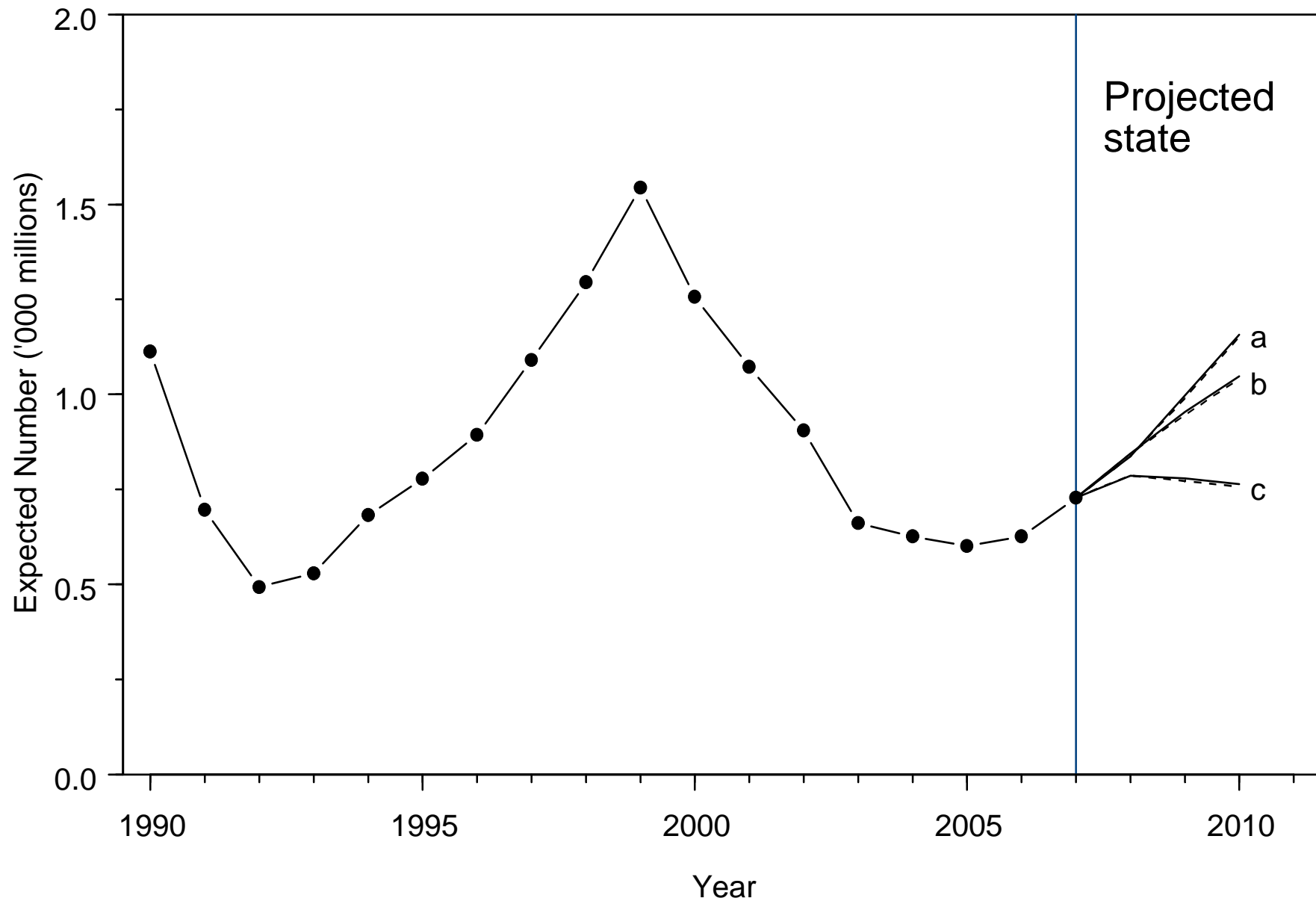
Information was the key to identifying issues

- Information from population and disease surveys
- Strategic research plan established
- Developing models to evaluate and predict
 - Stock assessment model
 - Disease model
- Engagement of partners to develop new ways of doing things



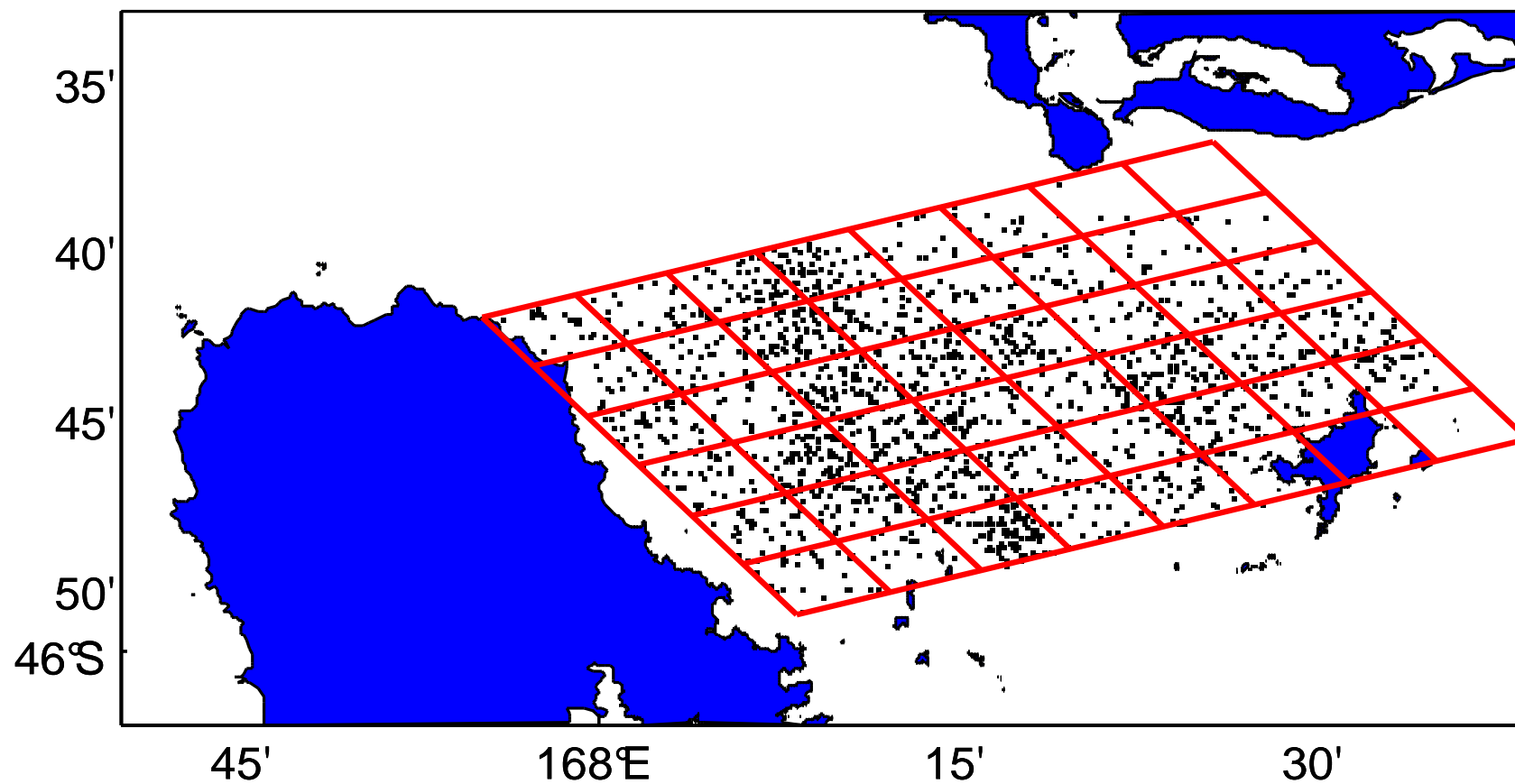
EXAMPLE

Stock assessment model



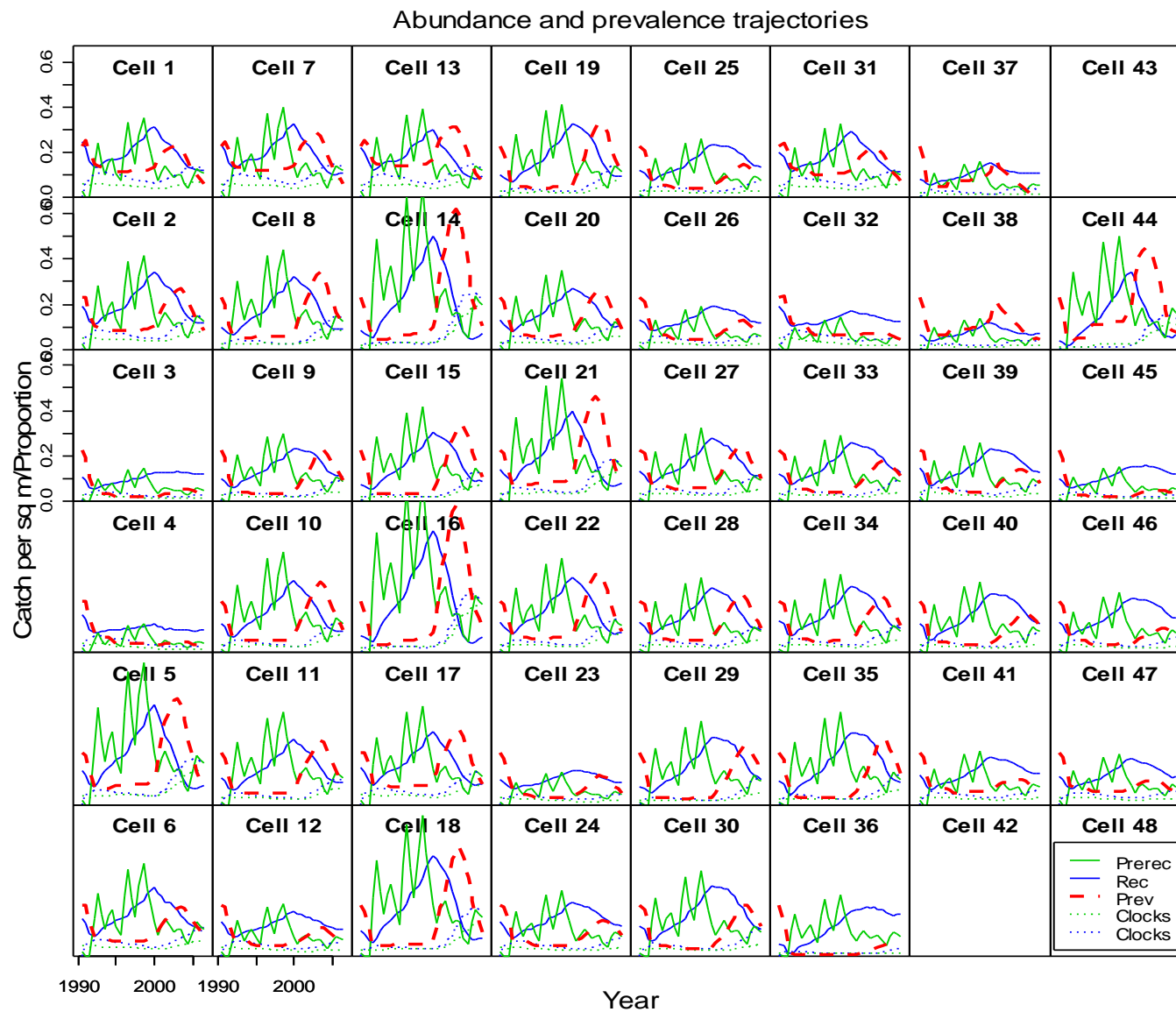
EXAMPLE

Disease model



EXAMPLE

Disease model



EXAMPLE

Contributing to existing knowledge

Sources

- Fishers' logbooks
- Customary catch
- Recreational reporting discussed

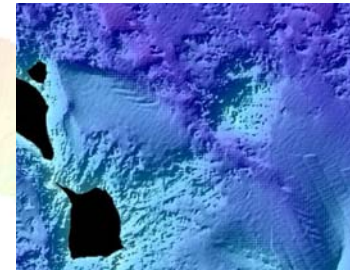
Information needs to be

- Accurate
- Standardised
- Recorded for a specific purpose
- Time-series of data particularly useful for modelling

EXAMPLE

Providing new information (research)

- Biological and ecological processes
- Habitats and physical processes
- Potential drivers of fishery production
- Models
- Simple and effective communication



EXAMPLE

Collaborative bottom-up management has worked



- Where there is a will
- There has been contribution and compromise
- There is a draft operational plan for the fishery
- The Fisheries Plan group will continue to work in partnership
 - Workshops to develop harvest and disease mitigation strategies
 - Ongoing research to refine and evaluate



