

Review and Discuss Management Strategy Evaluation Results

Meeting #5 November 21, 2019

Bill Harford, University of Miami

Jono Wilson, TNC

Laura Rogers-Bennett, CDFW

Julia Coates, CDFW

My goals for this talk:

- Describe some 2-zone rebuilding strategy options
- Provide an understanding of the trade-offs between these options
- We'll discuss three trade-offs

What are the options?

Density
percentiles

Density
percentiles

$$T_{DL} = T_{DI} = T_{DT} = 75\%$$

$$T_{DL} = T_{DI} = T_{DT} = 100\%$$

SPR limit = 0.5

A

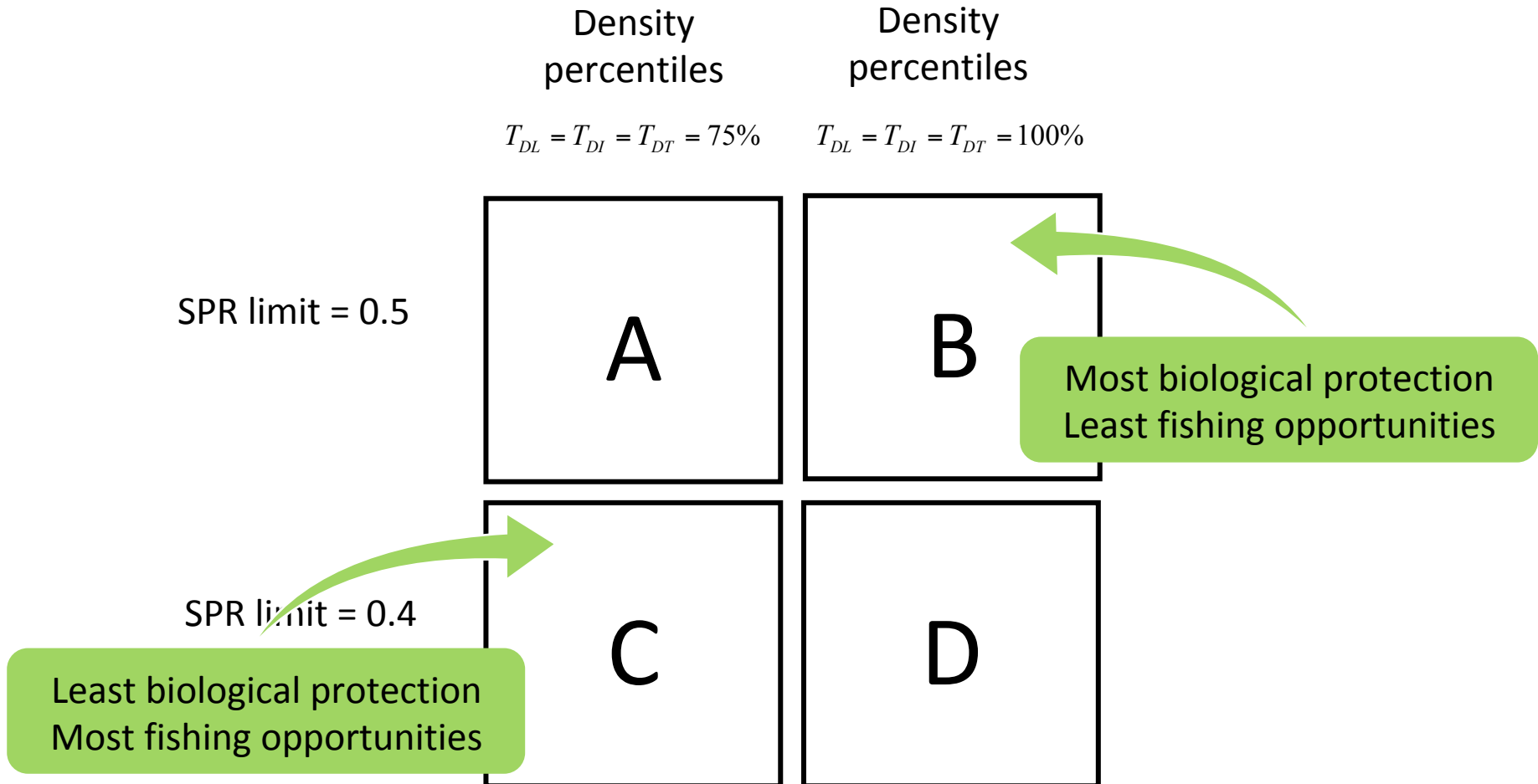
B

SPR limit = 0.4

C

D

What are the options?



What are the options?

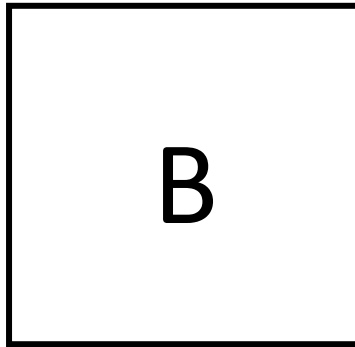
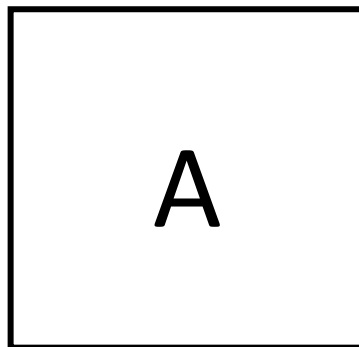
Density
percentiles

Density
percentiles

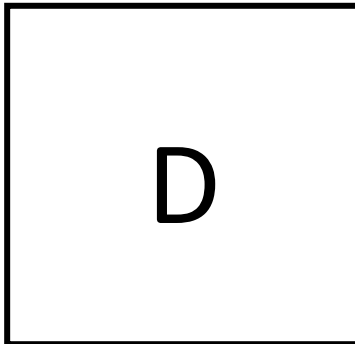
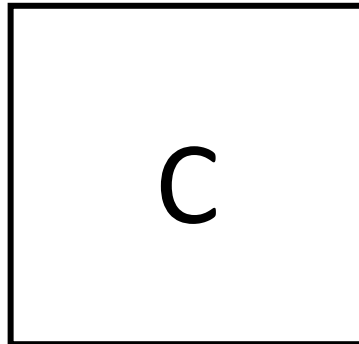
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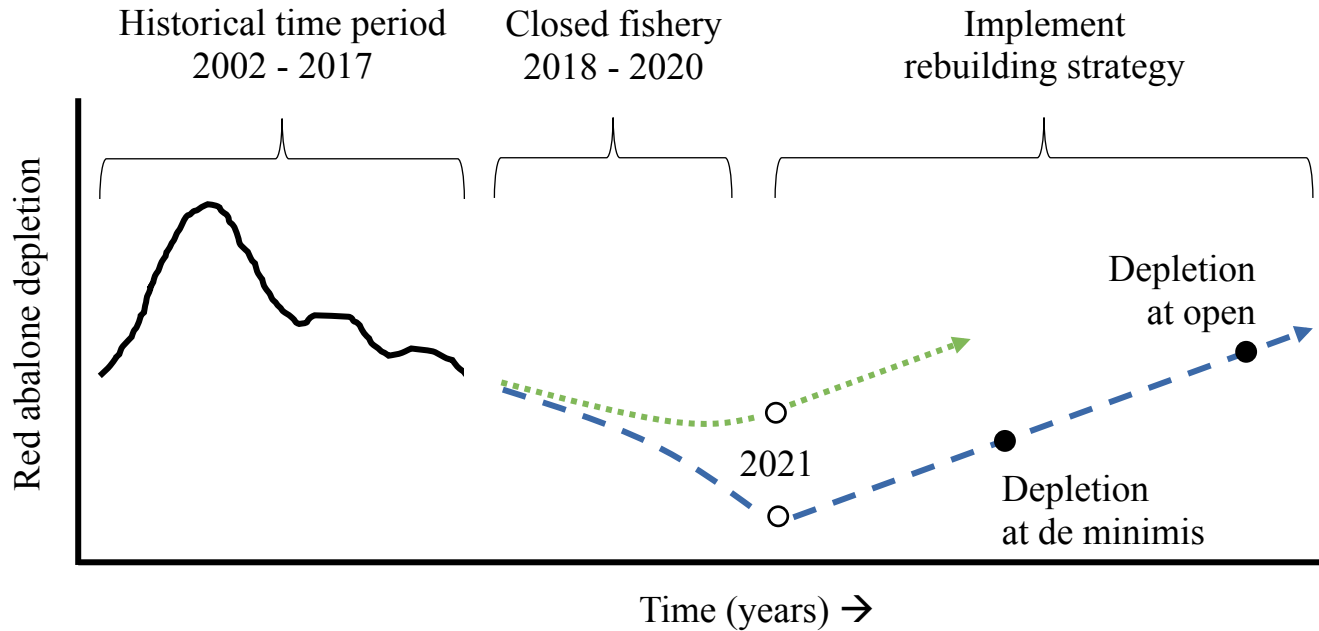


X

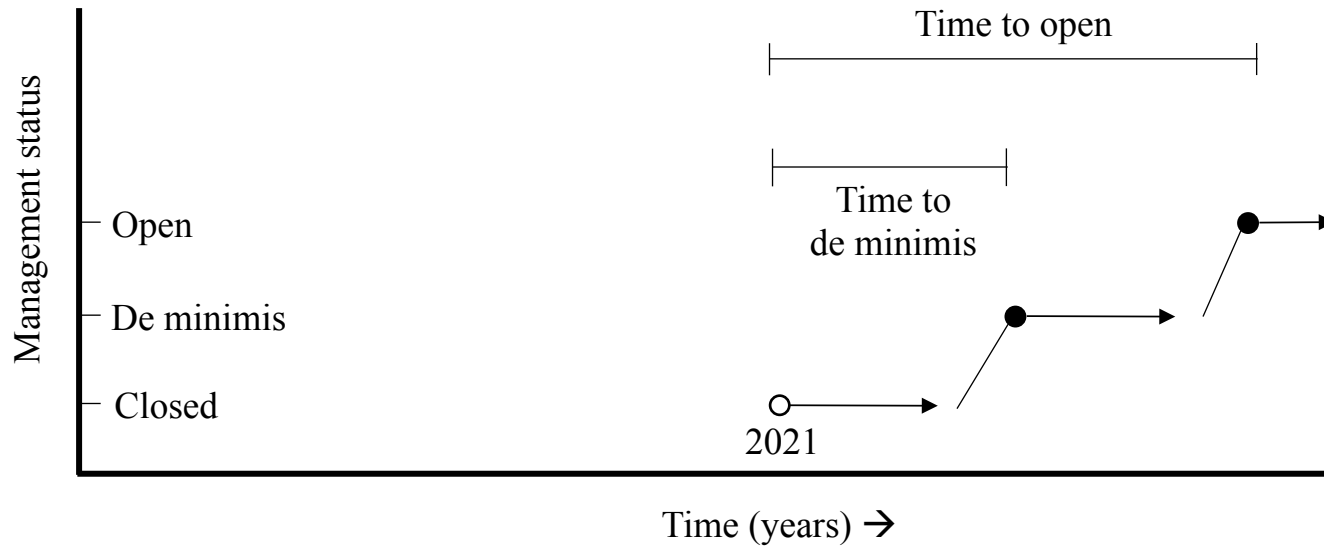
De minimis TAC

$\left\{ \begin{array}{l} 5,000 \\ 10,000 \\ 20,000 \\ 40,000 \end{array} \right\}$

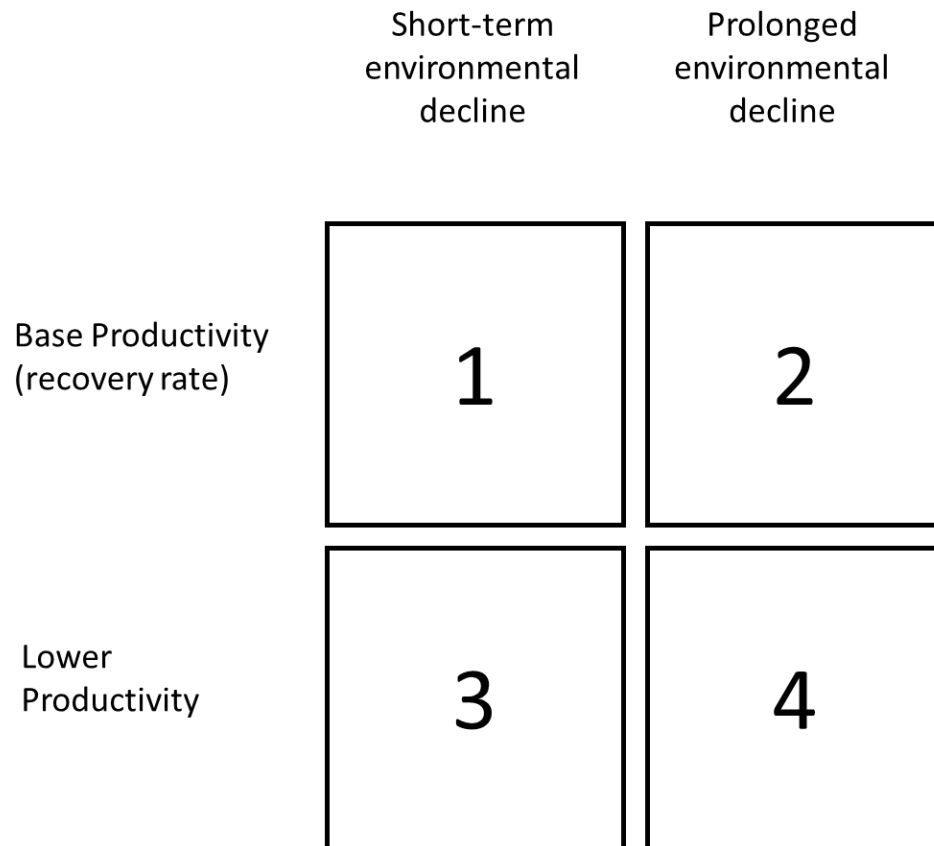
What is MSE again?



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Before we begin...

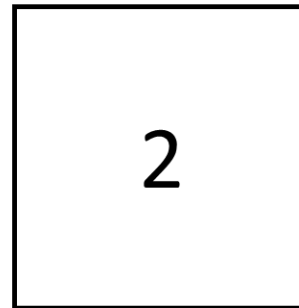
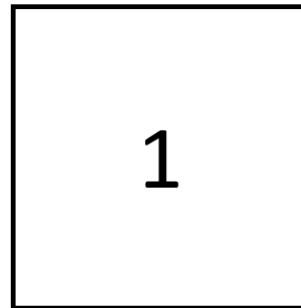


Before we begin...

Short-term
environmental
decline

Prolonged
environmental
decline

Base Productivity
(recovery rate)



Trade-off #1:

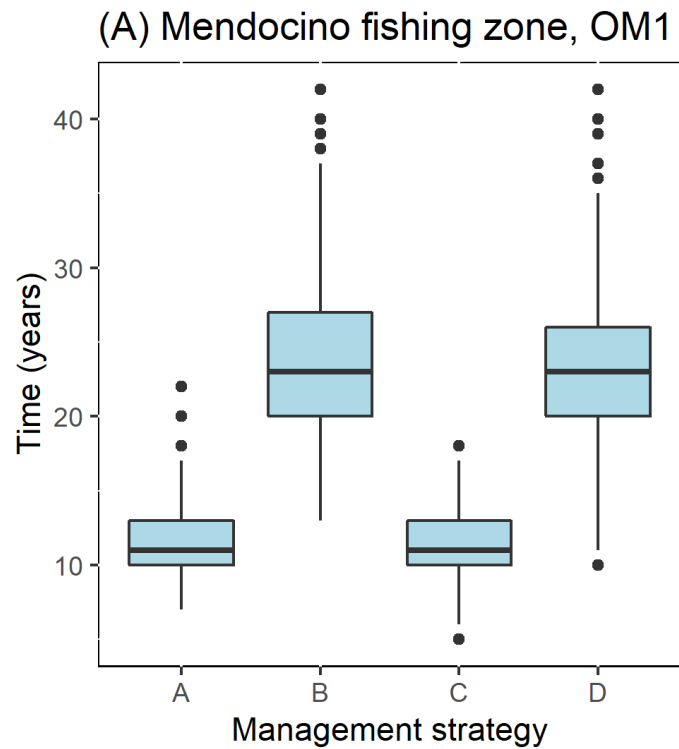
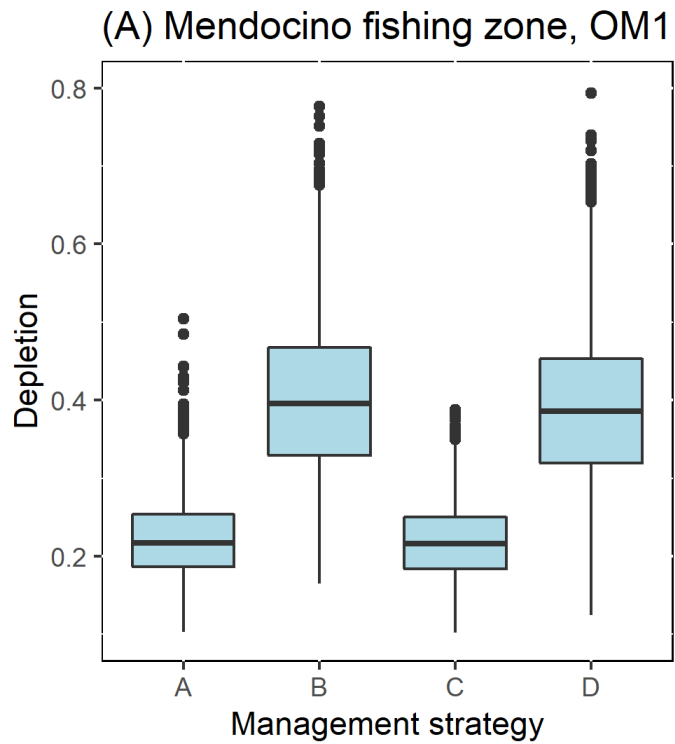
De minimis fishery sooner

vs.

Affording more protection to abalone?

Trade-off #1:

De minimis fishery sooner
vs.
afford more protection to abalone?



Trade-off #2:

Recovery time to open fishery

vs.

Catches via de minimis TAC

(How do we choose a de minimis TAC?)

From OPC red abalone project website:

Definition of de minimis fishery:

A fishery with a level of catch that is anticipated to have little to no effect on the health or recovery of a fishery resource

Go to handout

Trade-off #3:

Putting it all together:

De minimis TAC

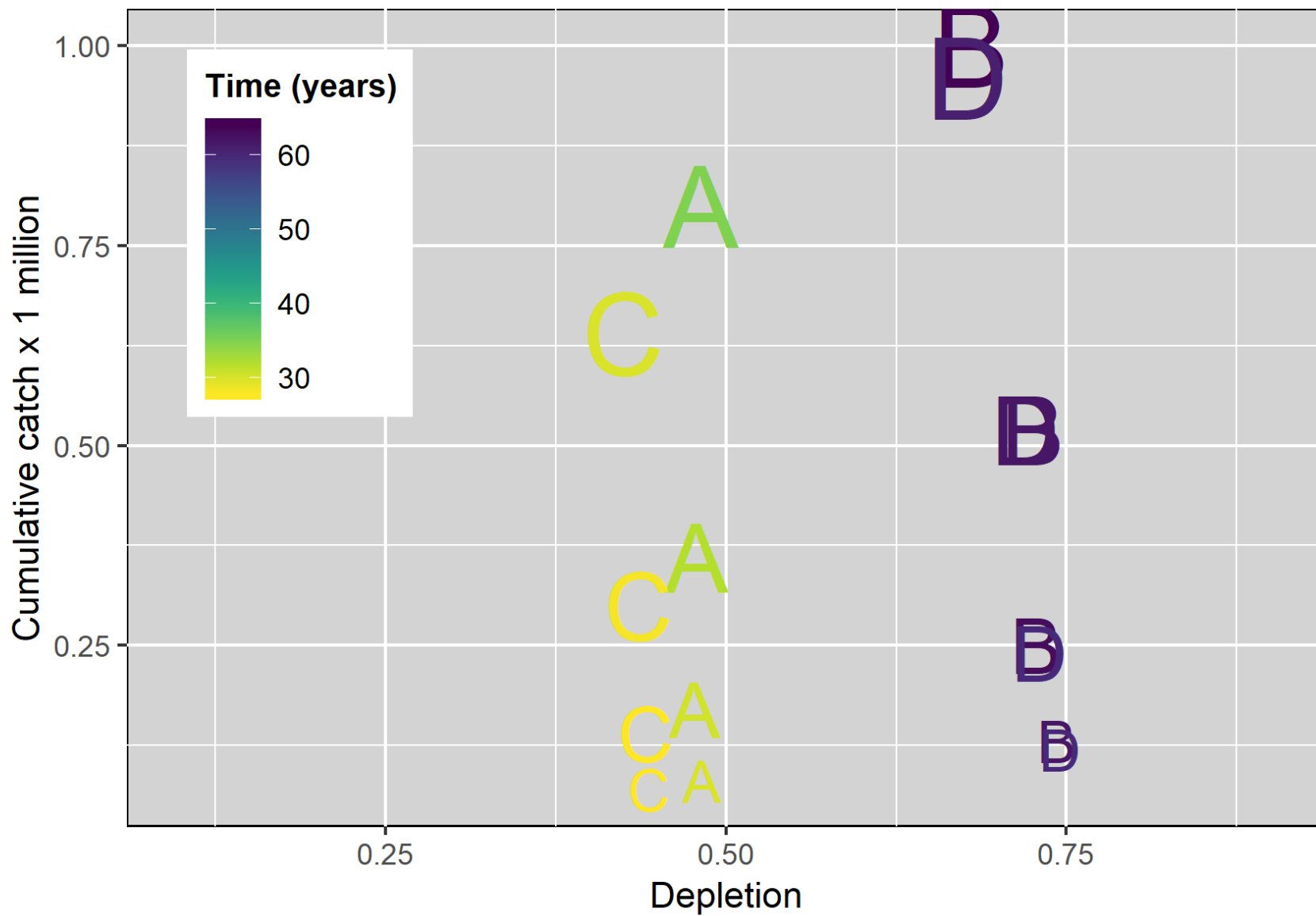
Vs.

Recovery time to open

Vs.

Sufficient protection of the
resource

(A) Mendocino fishing zone, OM1



(A) Sonoma fishing zone, OM1

