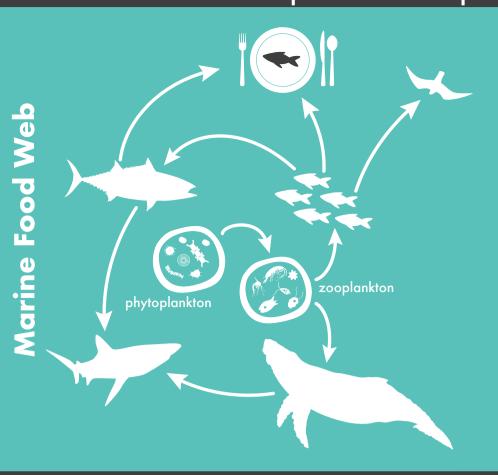
OCEAN FERTILIZATION:

Can iron addition keep fish on our plates?



The entire marine food web is supported by tiny plants called phytoplankton.



Phytoplankton require nutrients, like nitrogen, phosphorus, and iron to grow.

Iron is available in especially small quantities in the ocean, so it limits phytoplankton production in many regions.

Iron addition experiments in marine ecosystems

Although many iron addition experiments have stimulated phytoplankton blooms, very few, if any studies to date have focused on higher trophic levels like fish.





addition

■ Iron ■ addition

addition

Days Weeks Months

Years

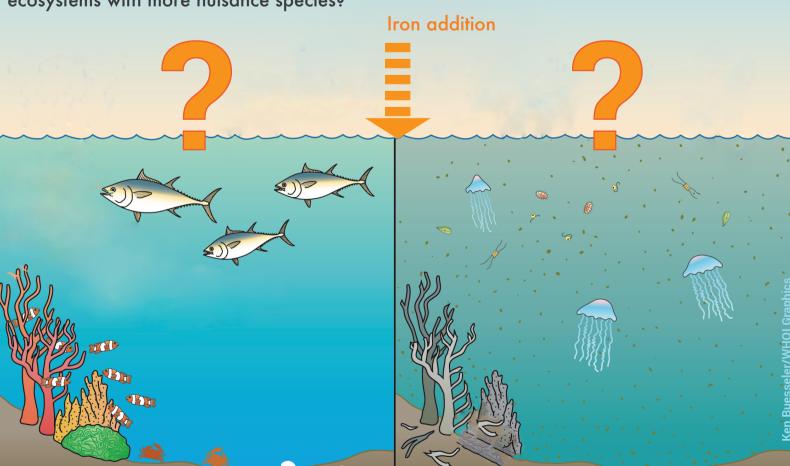
Decades



It takes years for phytoplankton growth to yield fish of appropriate catch size, with predation and other food web processes in between.

How will iron addition affect marine fisheries?

Will we see healthy, thriving ecosystems with plenty of fish or degraded ecosystems with more nuisance species?



How do we move forward?

We need controlled scientific iron addition experiments in dynamic coastal fishery settings to study the response of marine food webs, including commercially important fish species.

BLIND CORNER PROCEED WITH CAUTION