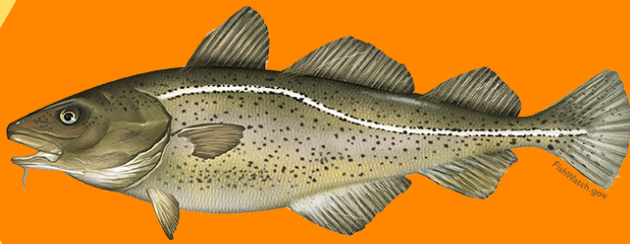


FISHERIES

THE CLIMATE IS
CHANGING, AND SO
IS OUR SEAFOOD
SUPPLY

of the FUTURE

EATING
WITH THE
ECOSYSTEM



FISH ON THE MOVE

As waters get warmer, cold-water fish like cod (left) are becoming less plentiful in New England waters. Warm-water fish like black sea bass (below) are becoming more abundant.

SEASONAL SHAKEUP

Migratory fish are arriving earlier in the year and leaving later. Climate change is "reshuffling the deck" in marine ecosystems - forcing fish, fishermen, and seafood supply chains to adapt.



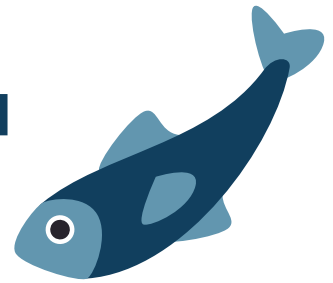
SEAFOOD LOVERS CAN HELP!



- INCOMING! TRY NEW SPECIES AS THEY APPEAR IN LOCAL WATERS.
- BUY LOCAL! SHORT SUPPLY CHAINS ADAPT MORE RAPIDLY.
- GREET THE FLEET! ASK FISHERMEN WHAT'S AROUND - AND EAT IT FOR DINNER.
- BE A HABITAT HERO! HEALTHY HABITATS HELP FISH COPE WITH A CHANGING CLIMATE.

FISHERIES OF THE FUTURE

ADAPTING OUR SEAFOOD SYSTEM TO A CHANGING CLIMATE



CHANGE AND VARIABILITY

Climate *change* is a long-term manmade warming trend. Climate *variability* is a series of natural ups and downs. Both are happening and will continue to happen. Both affect local fisheries. In the graph below, dots represent yearly temperature averages. The wavy line represents natural variability. The straight line represents climate change.



1950s: Warmer period with fisheries like those of today: lots of black sea bass and squid; few cod and yellowtail.

1960-70s: Cooler waters. The lobster fishery in Southern New England is very small and the groundfish fishery (cod, haddock, pollock) is thriving.

Today: Warmer waters. An abundance of warm-water species is making its way into New England as lobsters and cod shift deeper and northward.

Future: It's likely that temperatures will continue to rise and fall, with an underlying warming trend. The ocean may get cooler for a while, but manmade warming is still occurring.