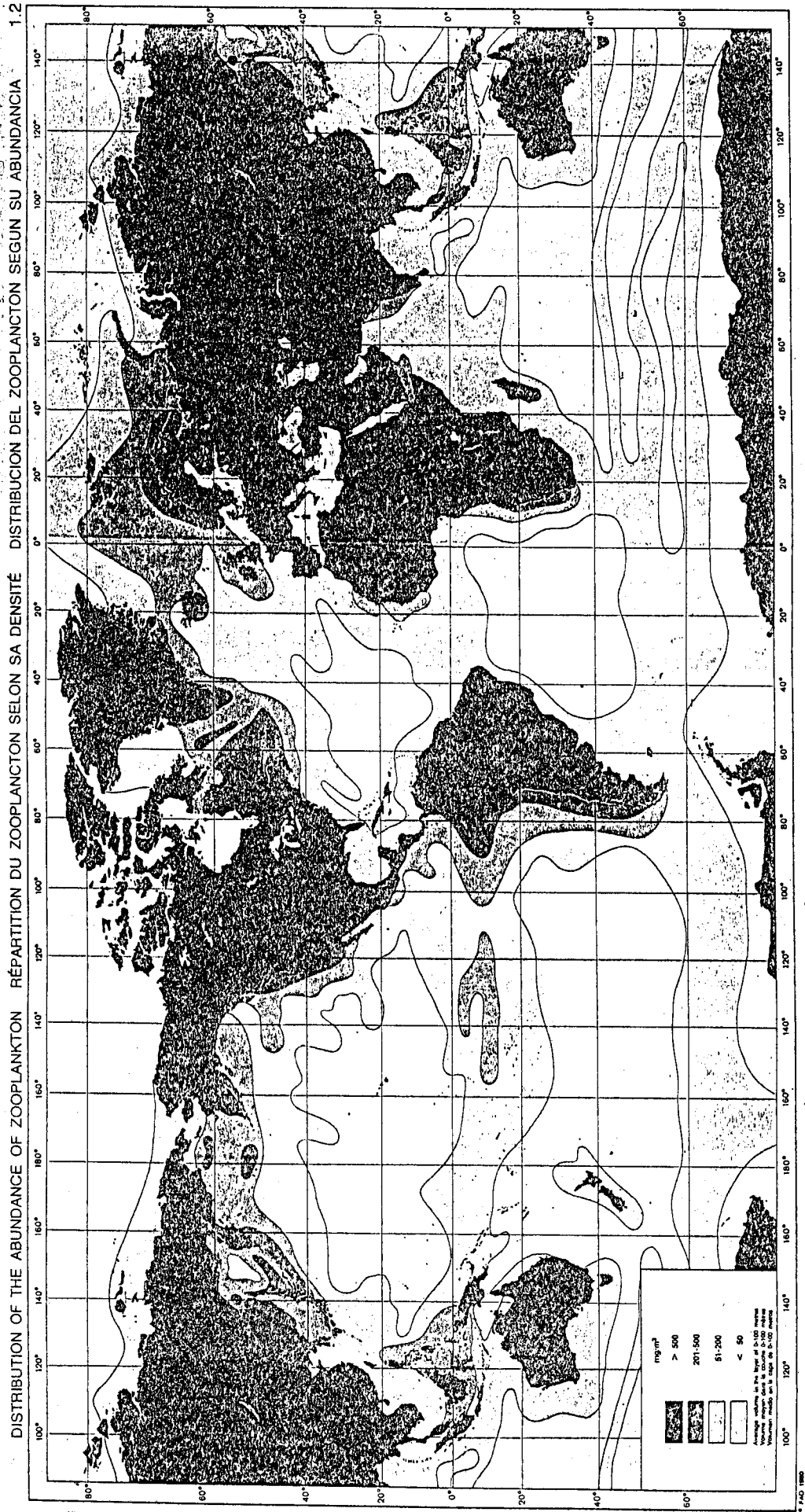


Where are the high concentrations of zooplankton productivity?

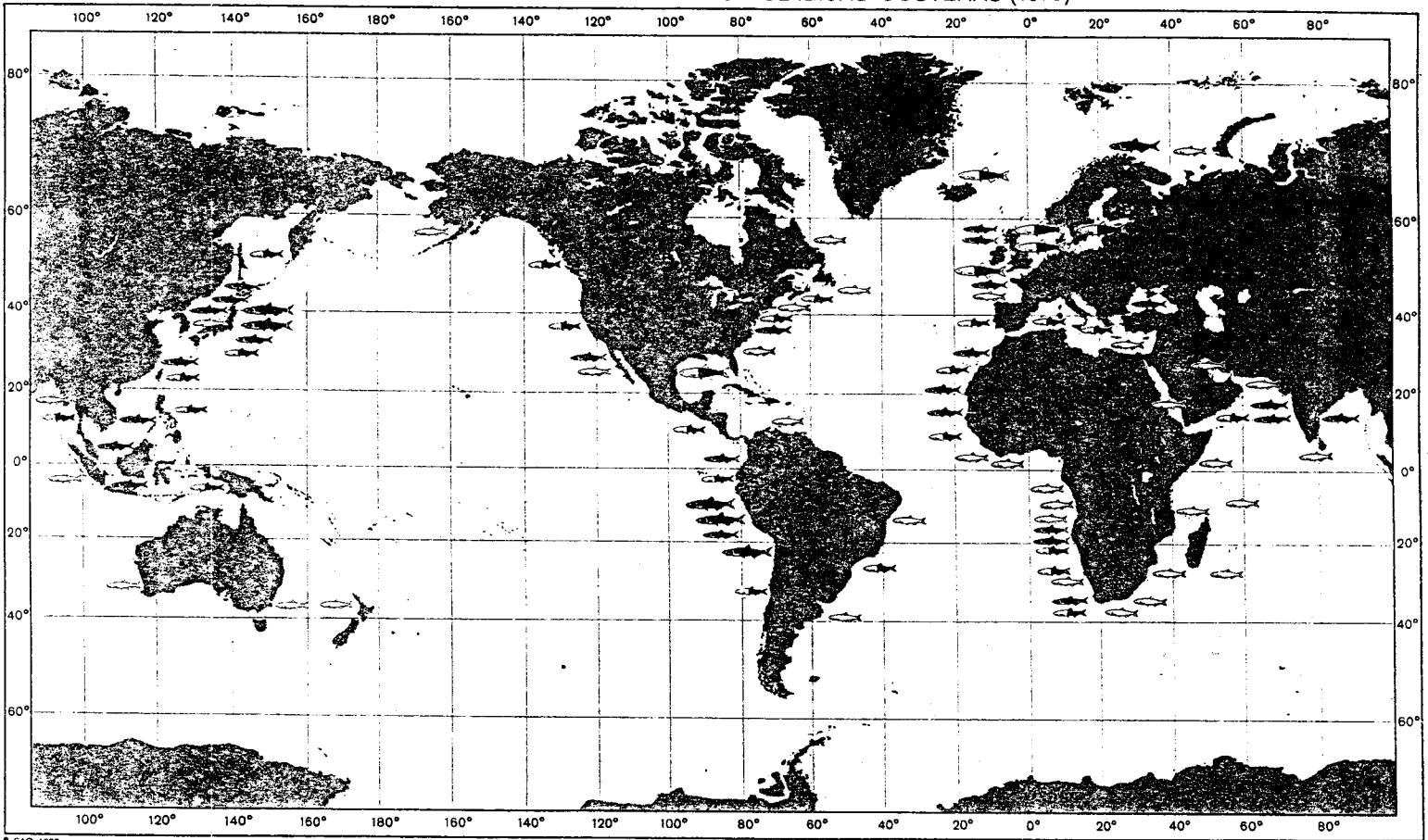


Zooplankton productivity tracks phytoplankton productivity.

What is the distribution of the pelagic fish catch?






1.7

DISTRIBUTION OF COASTAL PELAGIC CATCHES (1979)
RÉPARTITION DES CAPTURES PÉLAGIQUES CÔTIÈRES (1979)
DISTRIBUCION DE LAS CAPTURAS PELAGICAS COSTERAS (1979)



FAO 1980

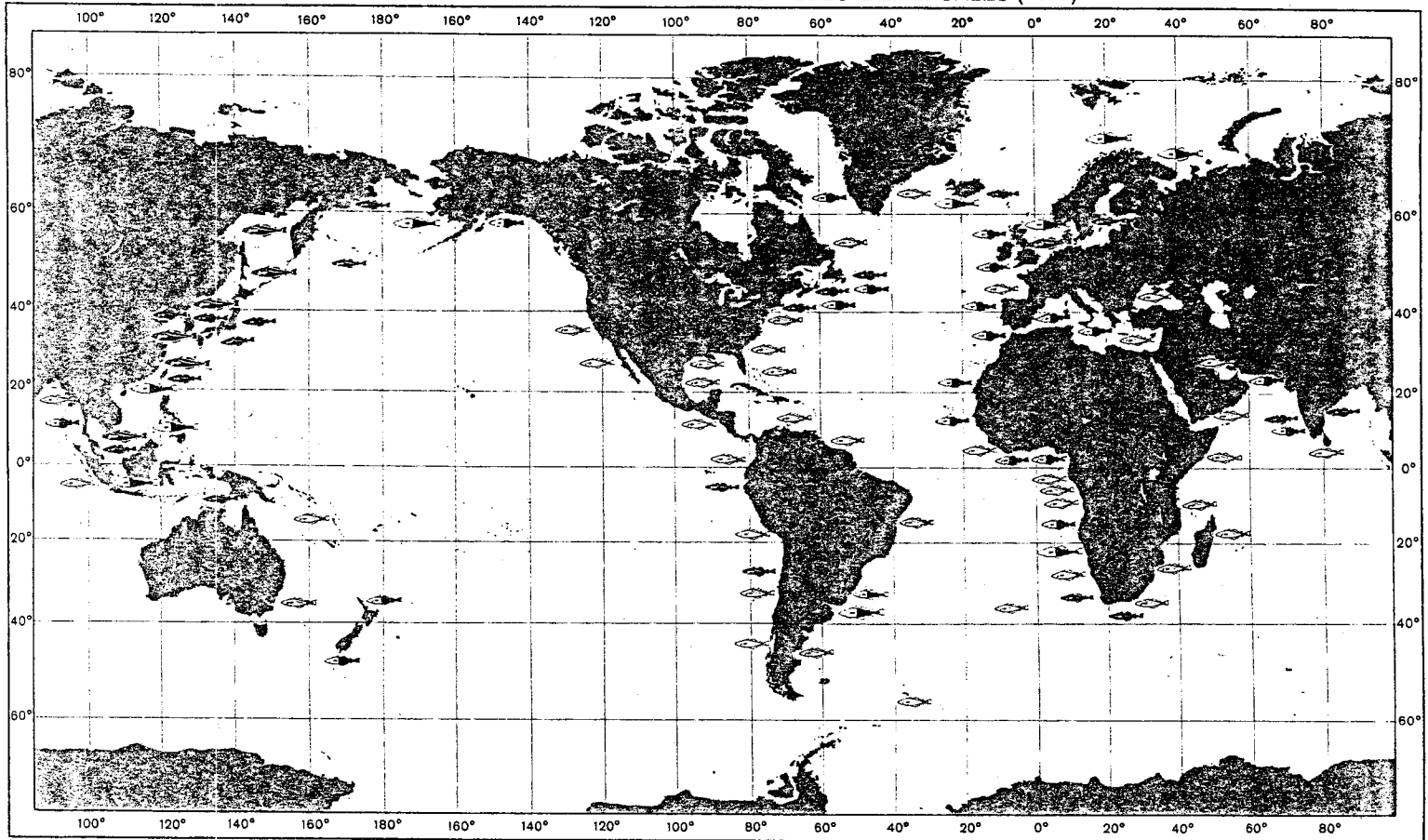
Estimated total catch - Captures totales estimées - Capturas totales estimadas
32 000 000 t

-  >1 000 000 t
-  500 000-1 000 000 t
-  200 000- 500 000 t
-  50 000- 200 000 t
-  <50 000 t

What is the distribution of the demersal fish catch?






DISTRIBUTION OF DEMERSAL CATCHES (1979)
RÉPARTITION DES CAPTURES DÉMERSALES (1979)
DISTRIBUCION DE LAS CAPTURAS DE PECES DÉMERSALES (1979)

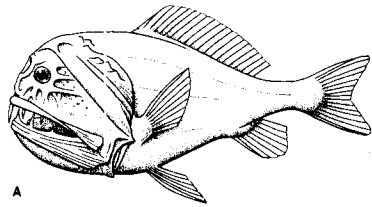
1.6



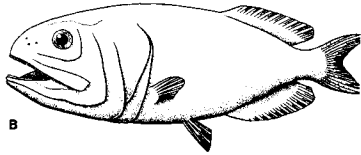
* FAO 1980

Estimated total catch - Captures totales estimées - Capturas totales estimadas
21 000 000 t

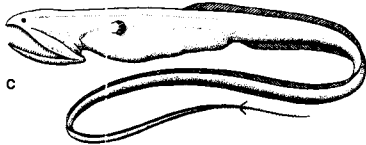
-  >1 000 000 t
-  250 000-1 000 000 t
-  50 000-250 000 t
-  25 000-50 000 t
-  <25 000 t



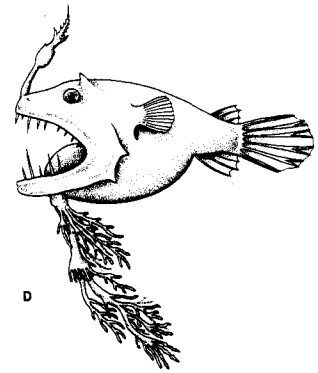
FROGFOOTUS
ANOPLOGASTRIDAE



WHALE FISHES
RONDELETIIDAE



SWALLOWER
SALLOPHARYNGIIDAE

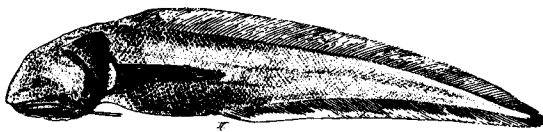


ANGLER FISHES
ORDER LOPHIIFORMES

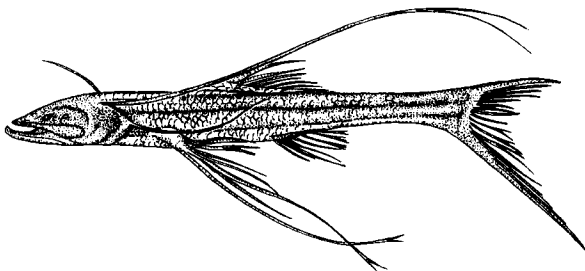
- **Bottom line:** community regulation = bottom-up from detritus supply

4. Abyssal

- Few fish at all live in abyss b/c of extreme pressure; those that do are largely scavengers on carcasses that fall down



CUSK EELS
OPHIIDAE
ABYSSOBRAUTULA GALATHEA



IPNOIIDAE
BATIMPTEROID ODDI

- Although you've heard about the deep-sea vent communities that subsist on anaerobic productivity, fish don't live in these communities
- **Bottom line:** community regulation = bottom-up from detritus supply