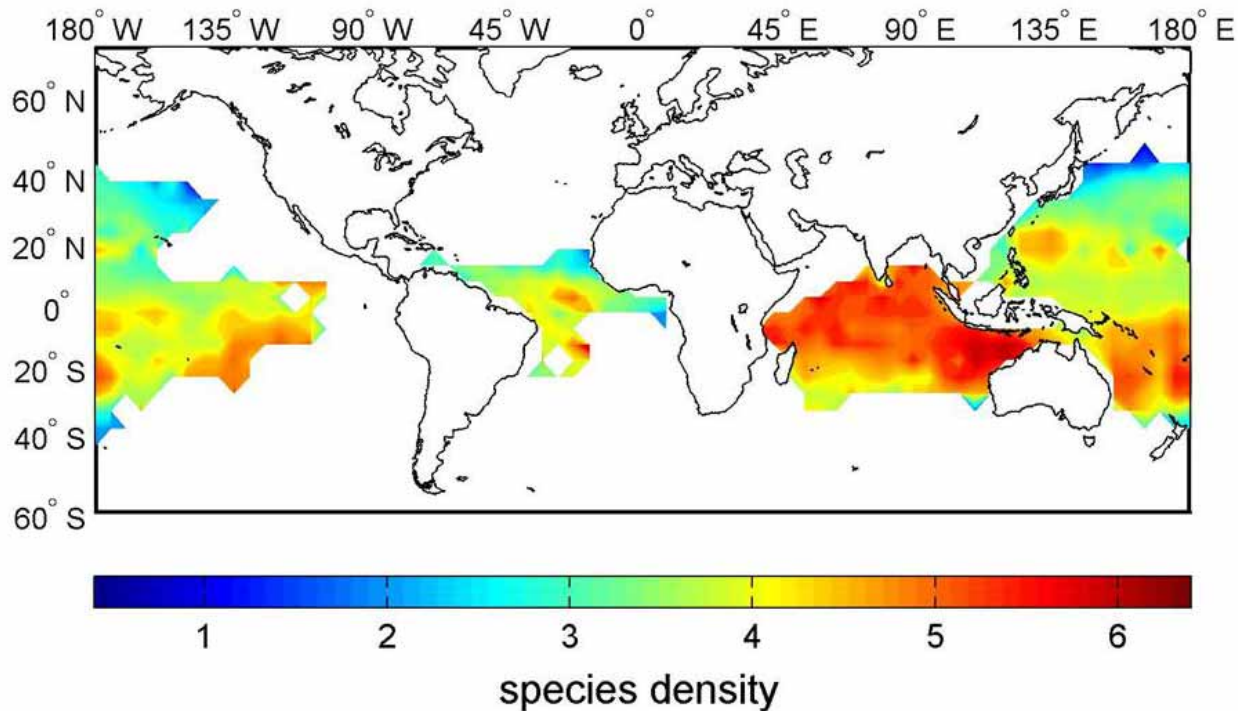
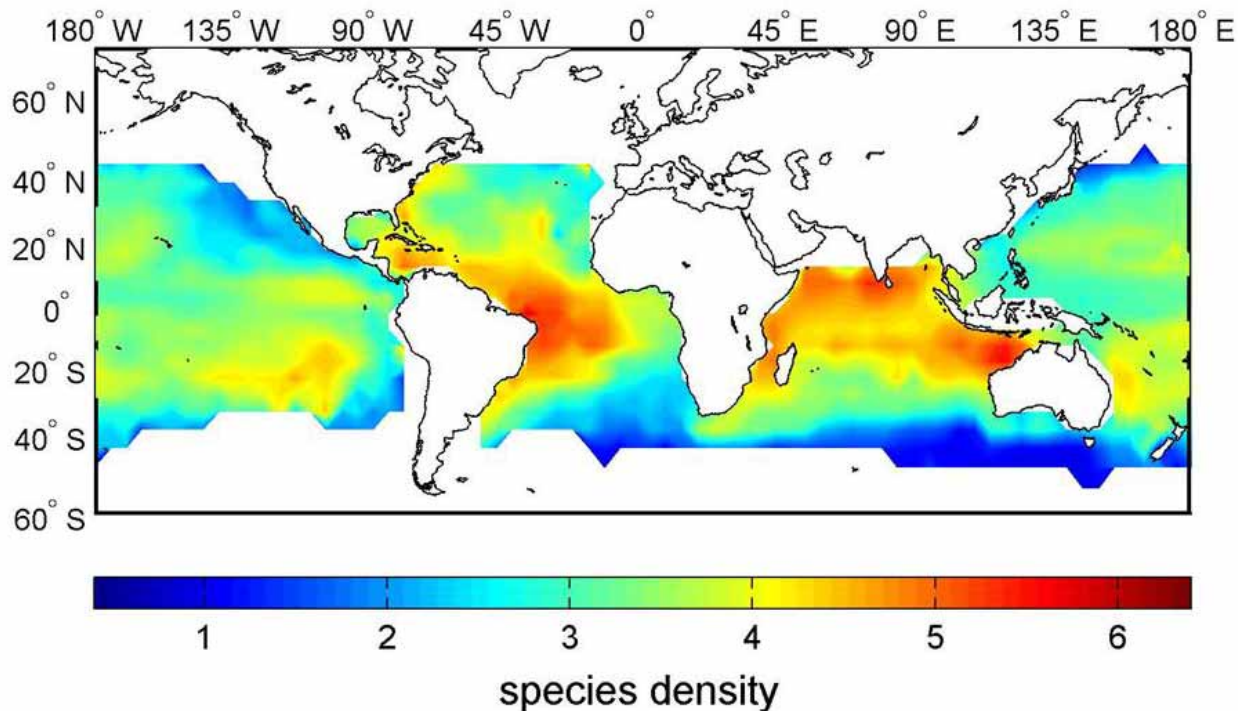


# 1950s



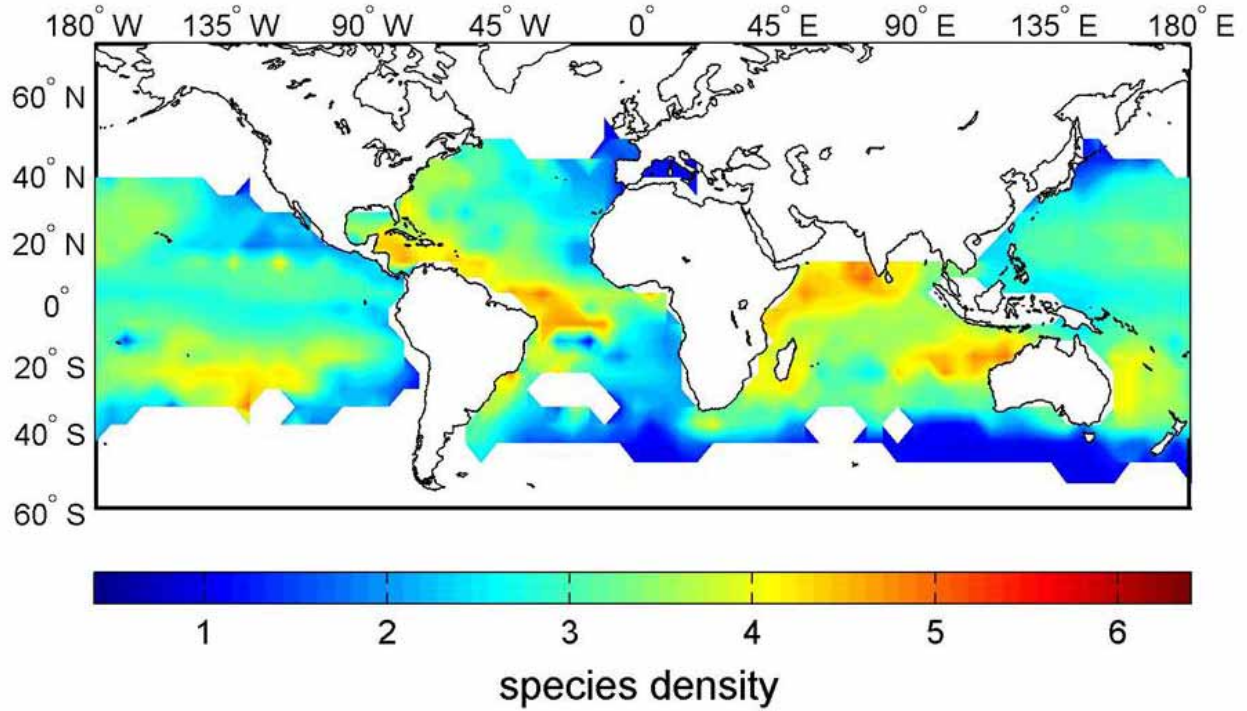
Source: Worm et al. 2005. Science: in press

# 1960s



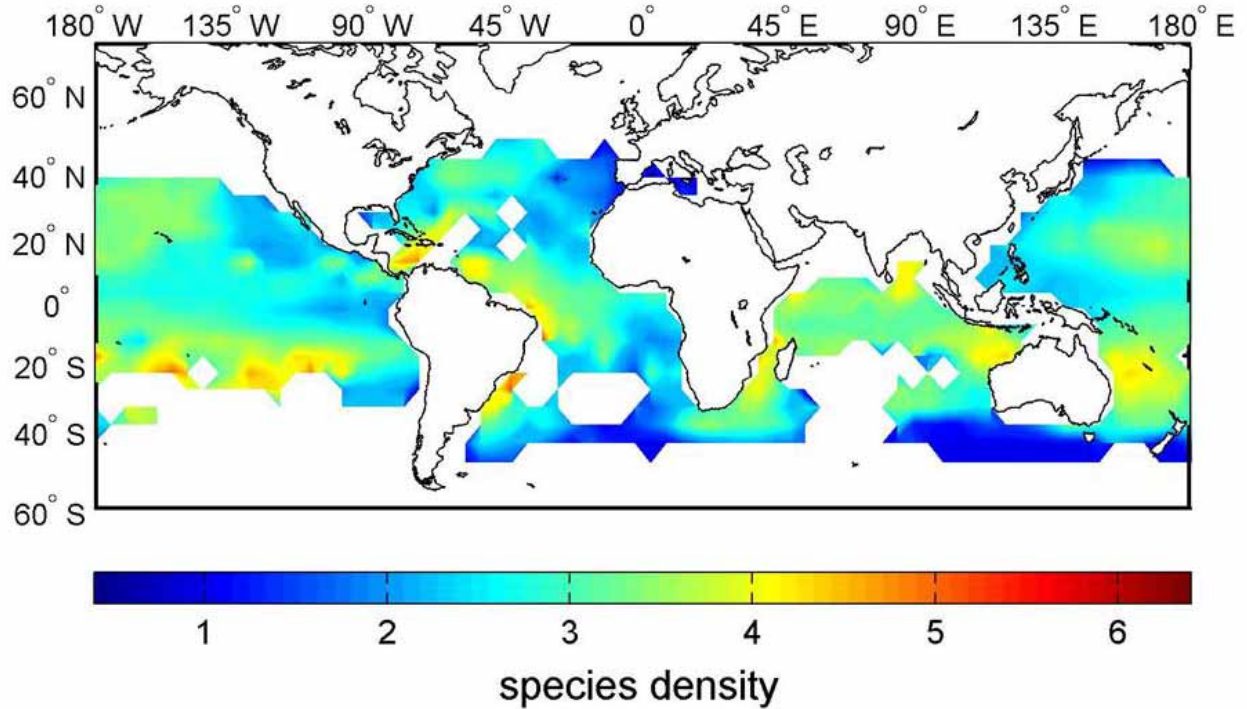
Source: Worm et al. 2005. Science: in press

# 1970s



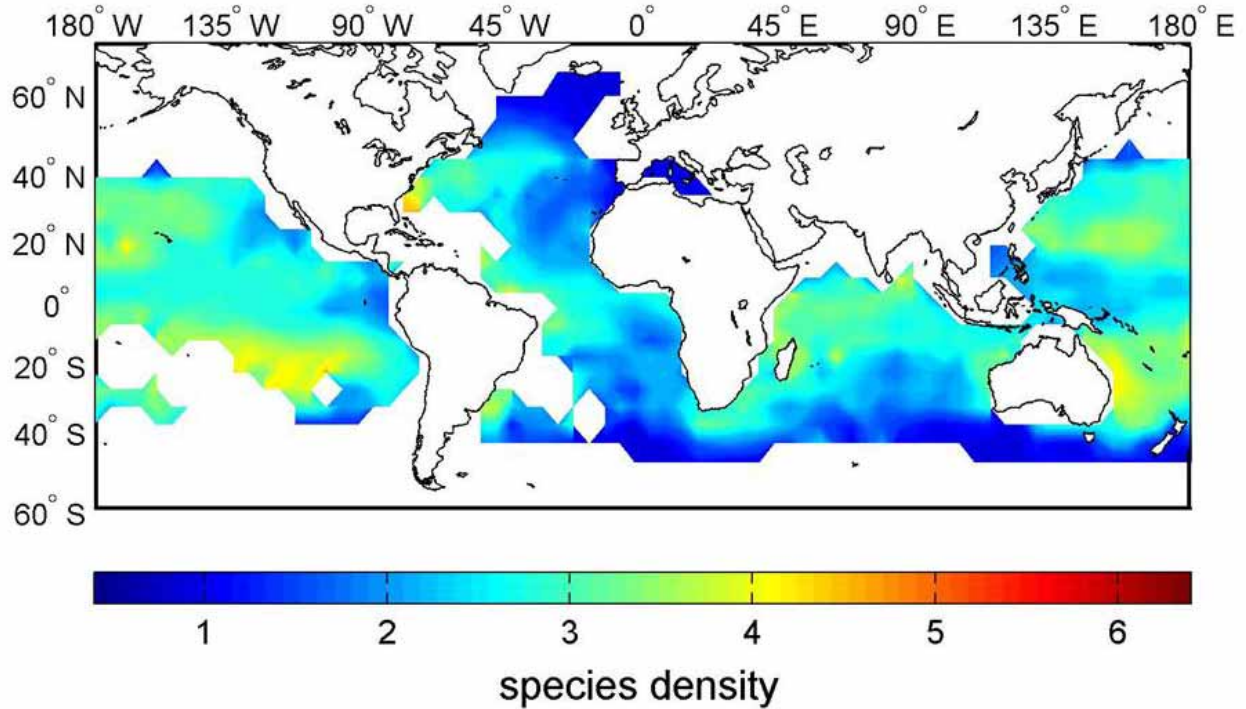
Source: Worm et al. 2005. Science: in press

# 1980s



Source: Worm et al. 2005. Science: in press

# 1990s

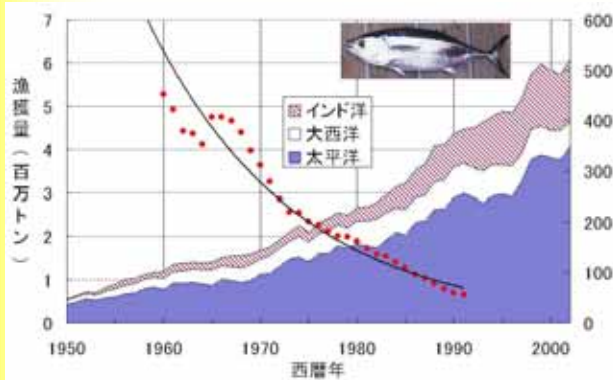


Source: Worm et al. 2005. Science: in press

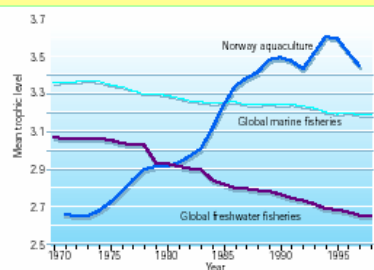
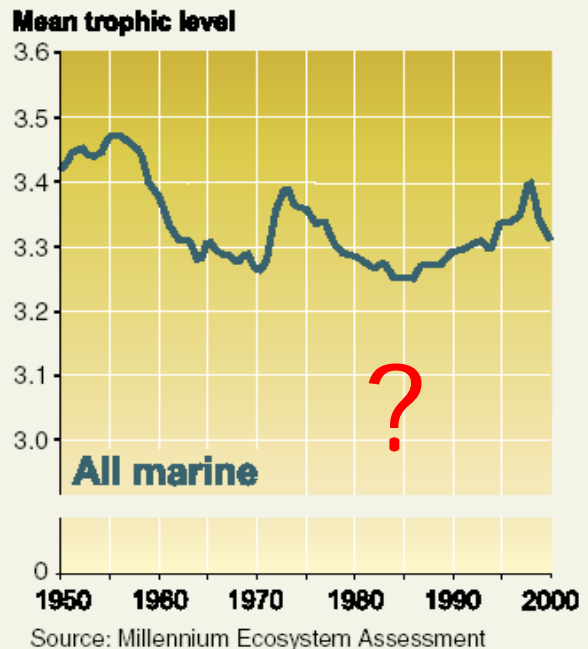


## 高級魚枯渇と漁獲対象の 低栄養段階化 (Fishing Down)

MA2005



Myers & Worm (2003)  
Nature, 松田(2006)



Pauly et al.  
2002 Nature