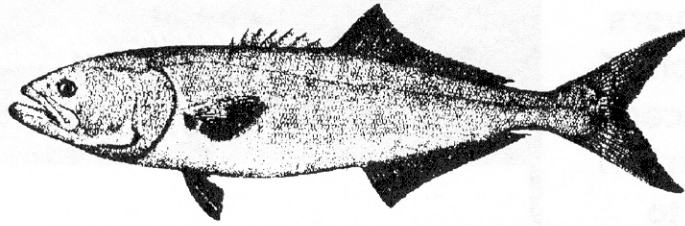


Bluefish



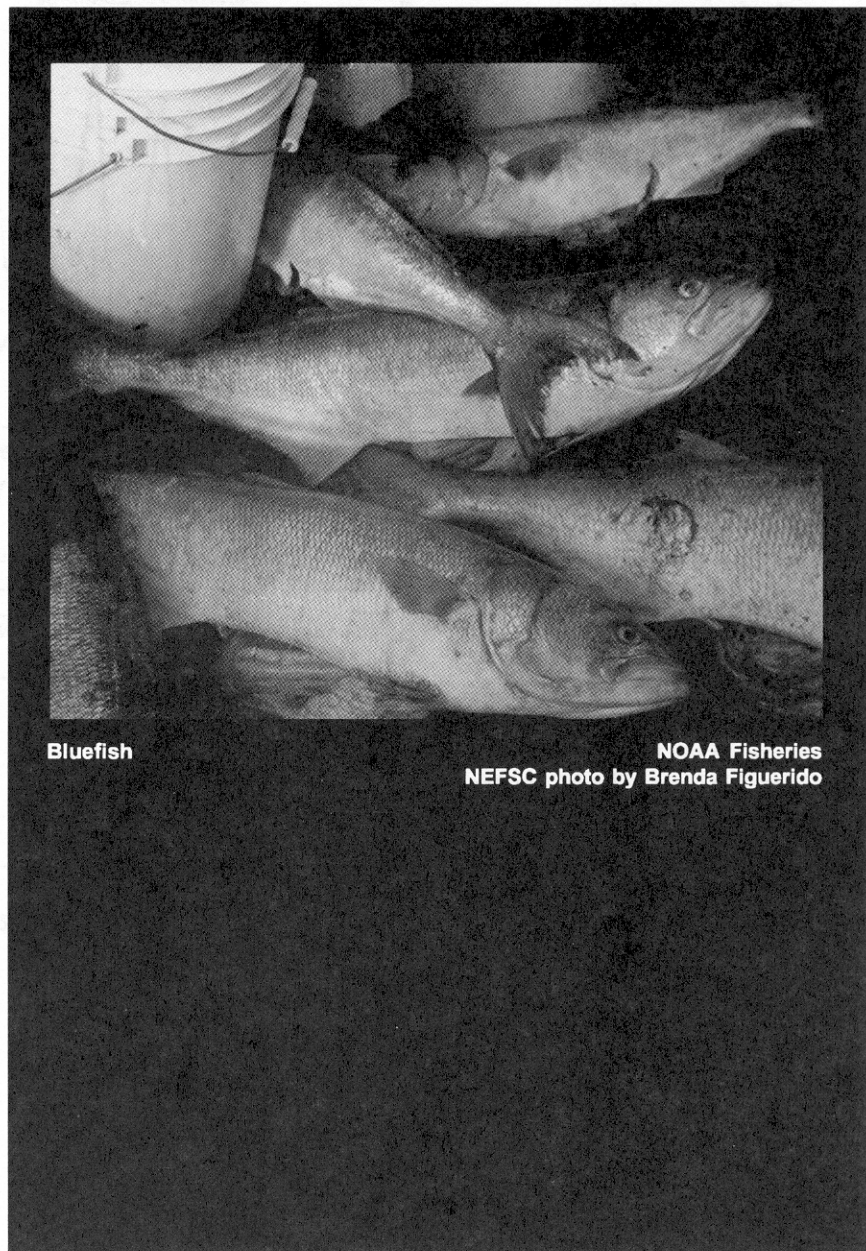
by M. Terceiro

The bluefish, *Pomatomus saltatrix*, is a migratory, pelagic species found throughout the world in most temperate coastal regions, except the eastern Pacific. Along the U.S. Atlantic coast, bluefish are found from Maine to Florida, migrating northward in the spring and southward in the fall. Bluefish are voracious predators that feed on a wide variety of fish and invertebrates. They may reach ages of about 12 years and sizes in excess of 100 cm (39 in.) and 14 kg (31 lb).

Atlantic coast bluefish spawn mainly in the spring in the South Atlantic Bight and during summer in the Middle Atlantic Bight. Fish from the two spawning seasons mix extensively on the fishing grounds and probably comprise a single genetic stock. A unit stock of bluefish along the Atlantic coast is assumed for management purposes. Bluefish are managed under a fishery management plan developed by the Mid-Atlantic Fishery Management Council and the Atlantic States Marine Fisheries Commission.

Total landings from Maine to Florida peaked in 1981 at an estimated 51,400 mt. Landings have since declined substantially; the 1994-1996 average (11,400 mt) was only 27% of the 1977-1986 average (41,600 mt). The recreational component of the fishery, which has historically constituted 80-90% of the total catch, peaked in 1981 at nearly 44,000 mt. Most of the recreational catch of bluefish is taken in the Middle Atlantic states (New York to Virginia). The 1996 recreational catch of 7,400 mt accounted for 65% of the total catch. There is no foreign fishery.

The principal commercial fishing gears used to catch bluefish are otter



Bluefish

NOAA Fisheries
NEFSC photo by Brenda Figuerido

trawls and gill nets. Commercial landings peaked in 1981 at 7,500 mt. Commercial landings averaged 6,200 mt annually from 1987-1991 and have since declined; the 1996 figure was 3,900 mt, 35% of the total.

In early 1998, Atlantic coast bluefish were assessed using a surplus production model that provided estimates of the fishing mortality rate (F_{MSY}) and stock biomass (B_{MSY}) required to produce maximum sustain-

“Bluefish have been overexploited since 1979 and the stock is currently well below levels needed to produce MSY.”



able yield (MSY) for bluefish, as well as estimates of stock biomass and fishing mortality through 1997. The analysis indicated that MSY of 42,700 mt can be produced by the Atlantic coast bluefish stock when biomass is approximately at $B_{MSY} = 107,500$ mt and fishing mortality on total stock biomass is $F_{MSY} = 0.40$. Bluefish stock biomass approached B_{MSY} during 1980-1981, but has since declined. Average stock biomass in 1997 was estimated at 22,700 mt, about 21% of B_{MSY} , and fishing mortality for 1997 was estimated at 0.51, about 25% higher than F_{MSY} . Bluefish have been overexploited since 1979 and the stock is currently well below levels needed to produce MSY.

For further information

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- Gibson, M.R., and N. Lazar. 1998. Assessment and projection of the Atlantic coast bluefish using a biomass dynamic model. A report to the ASMFC Bluefish Technical Committee and MAFMC Scientific and Statistical Committee.

*Atlantic Coast
Bluefish*

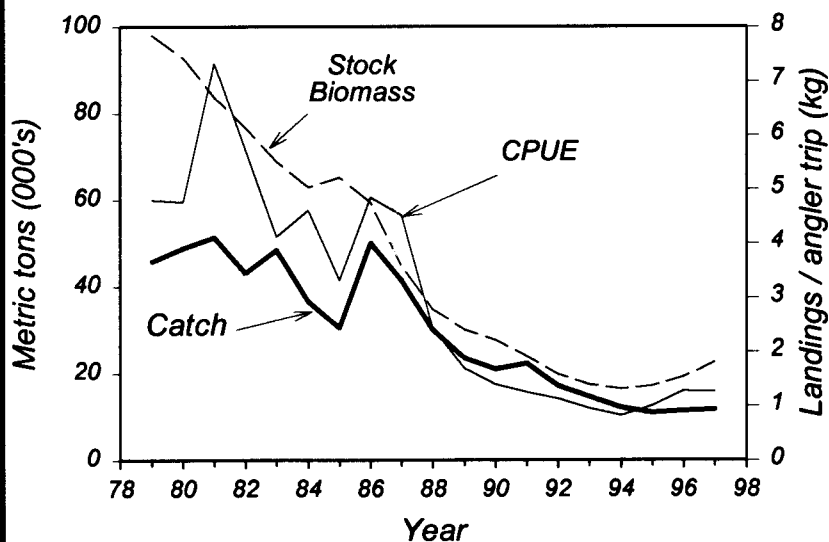


Table 24.1 Recreational catches and commercial landings (thousand metric tons)

Category	Year										
	1977-86 Average	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
U.S. recreational ¹	35.4	35.0	22.9	18.7	14.8	16.2	12.0	10.0	7.9	7.2	7.4
Commercial											
United States	6.2	6.6	7.2	4.7	6.2	6.2	5.2	4.7	4.3	3.6	3.9
Canada	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-	-
Total nominal catch	41.6	41.5	30.1	23.4	21.0	22.4	17.2	14.7	12.2	10.8	11.3

¹Landings and estimated discard mortality

Summary Status

- Long-term potential catch (MSY) = 42,700 mt
- Biomass for long-term potential catch = 107,500 mt
- Importance of recreational fishery = Major
- Management = Bluefish FMP
- Status of exploitation = Overexploited
- Age at 50% maturity = 1 year
- Size at 50% maturity = 35 cm (13.8 in.)
- Assessment level = Surplus Production
- Overfishing definition = F_{msy}
- Fishing mortality rate corresponding to overfishing definition = $F_{msy} = 0.40$

$M = 0.25$

$F_{0.1} = 0.36$

$F_{1997} = 0.51$