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LENGTH-FREQUENCY DISTRIBUTIONS OF RECREATIONALLY
CAUGHT REEF FISHES FROM PANAMA CITY, FLORIDA
IN 1978 AND 1979

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INTRODUCTION

The National Marine Fisheries Service Laboratory in Panama City, Florida has been engaged in life history research on recreationally and commercially important species of fishes from the Gulf of Mexico and southeast coast of the United States since 1977. A unique opportunity to sample fishes caught from charter and headboats was available by cooperating with the staff of Captain Anderson's fish house in Panama City. During 1978 and 1979, numerous lengths were measured of reef species caught within fifty miles of Panama City and landed at the fish house. Gonads, stomachs, and aging structures for other aspects of our research were collected at the same time.

Circulation of the draft fishery management plan for reef fishes by the Gulf of Mexico Fishery Management Council in 1979 called attention to the lack of data on reef species from the Gulf of Mexico. This technical report makes available our length frequency information for 1978 and 1979.

METHODS

Fork lengths (tip of snout to end of the rays in the center of the caudal fin) were measured to the nearest millimeter. All available individuals, or a maximum of about 600 individuals of each species, were measured each month. The snappers, red porgy, and triggerfish were sexed when possible and sexes are combined in monthly figures for this report. Histogram length intervals for larger species were based on 50 mm increments, while those for smaller species were based on 25 mm increments. The histograms are presented monthly for abundant species, and also combined into yearly and two year periods.

RESULTS

Data on thirteen species of reef fishes and consisting of 10,657 individuals are presented (Figures 1-21). Included are:

	<u>NUMBER OF FISH</u>	<u>FIGURE</u>
Gag grouper (<u>Mycteroperca microlepis</u>)	2433	1-2
Red porgy (<u>Pagrus pagrus</u>)	2320	3-5
Vermilion snapper (<u>Rhomboplites aurorubens</u>)	2219	6-8
Red snapper (<u>Lutjanus campechanus</u>)	2110	9-11
Gray triggerfish (<u>Balistes capriscus</u>)	778	12-13
Red grouper (<u>Epinephelus morio</u>)	248	14-15
Gray snapper (<u>Lutjanus griseus</u>)	222	16-18
Scamp (<u>Mycteroperca phenax</u>)	182	19-20
Snowy grouper (<u>Epinephelus niveatus</u>)	47	21
Yellowedge grouper (<u>Epinephelus flavolimbatus</u>)	42	21
Speckled hind (<u>Epinephelus drummondhayi</u>)	30	21
Warsaw grouper (<u>Epinephelus nigritus</u>)	21	21
Black grouper (<u>Mycteroperca bonaci</u>)	5	21
TOTAL	10,657	

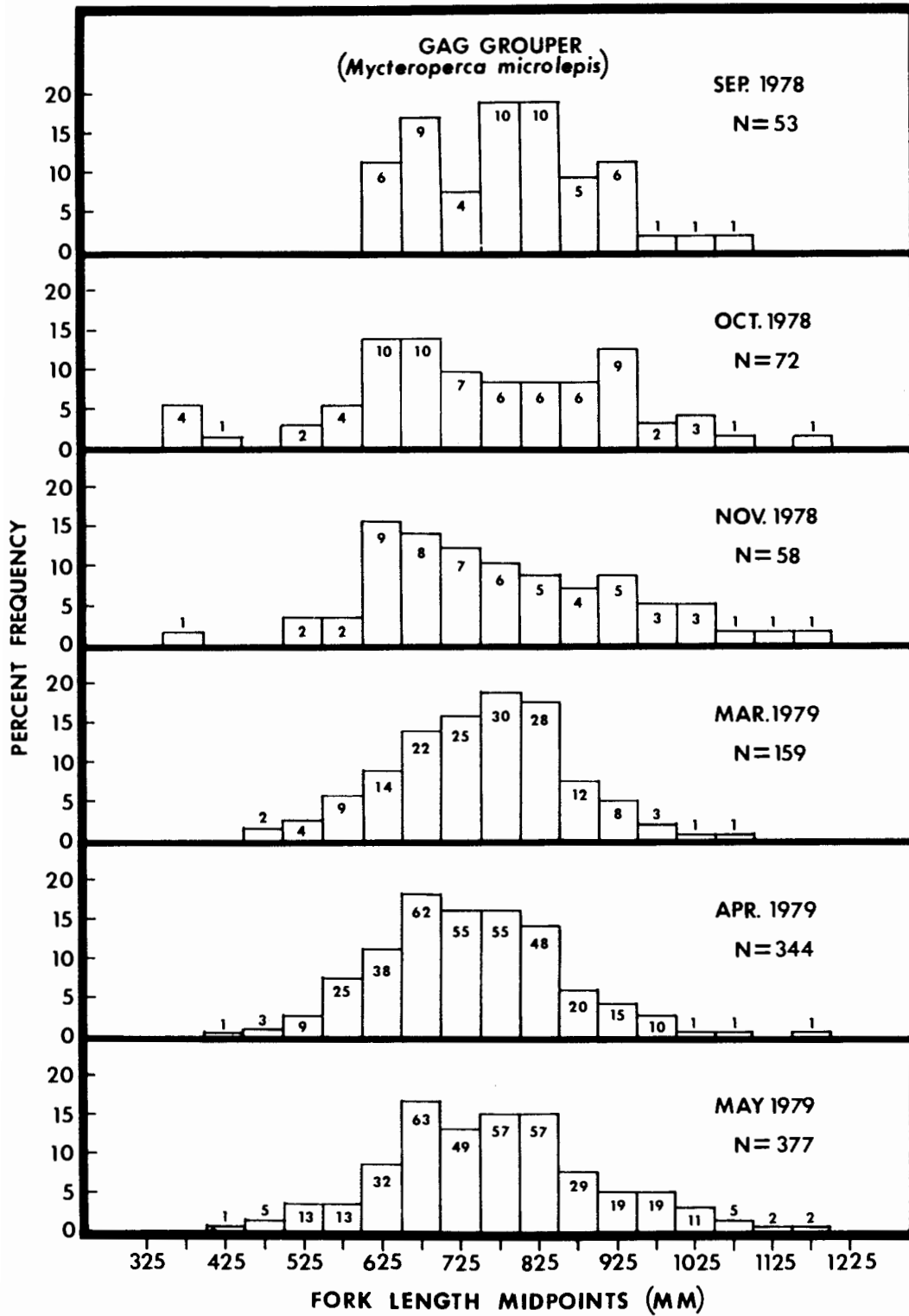


Figure 1. Length-frequency distribution of gag grouper (September 1978 - May 1979).

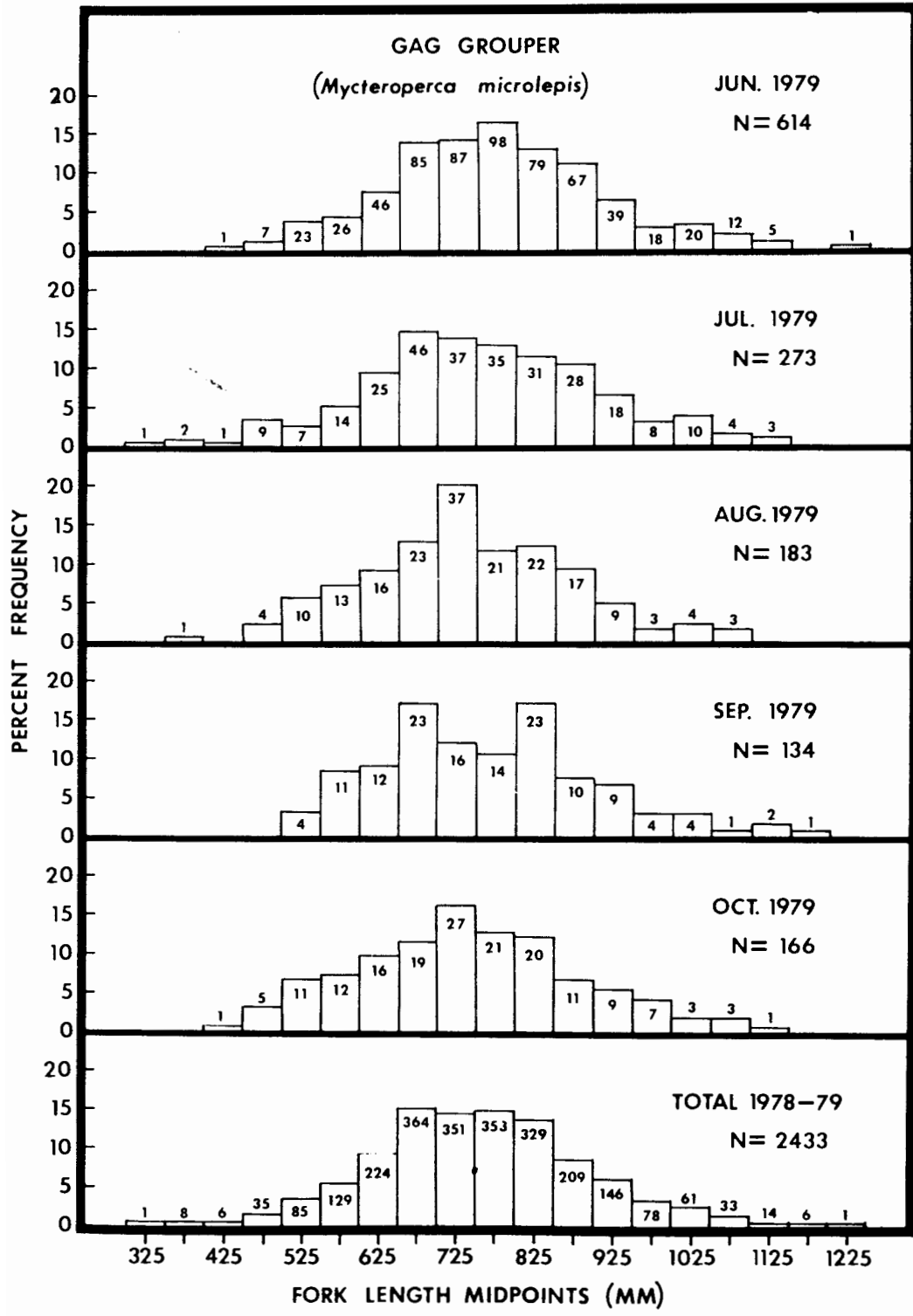


Figure 2. Length-frequency distribution of gag grouper (June - October 1979, total 1978-79)

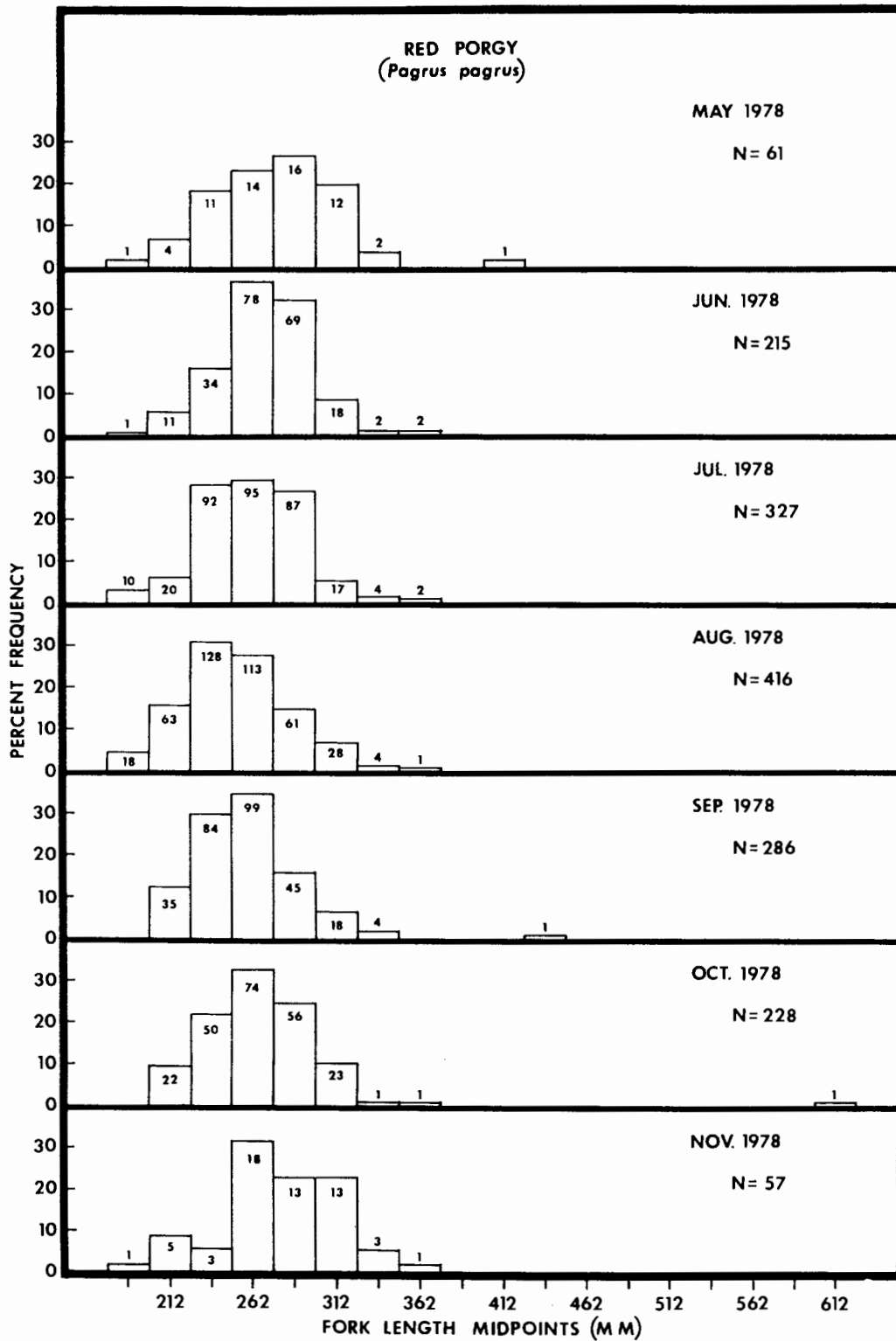


Figure 3. Length-frequency distribution of red pogy (May - November 1978).

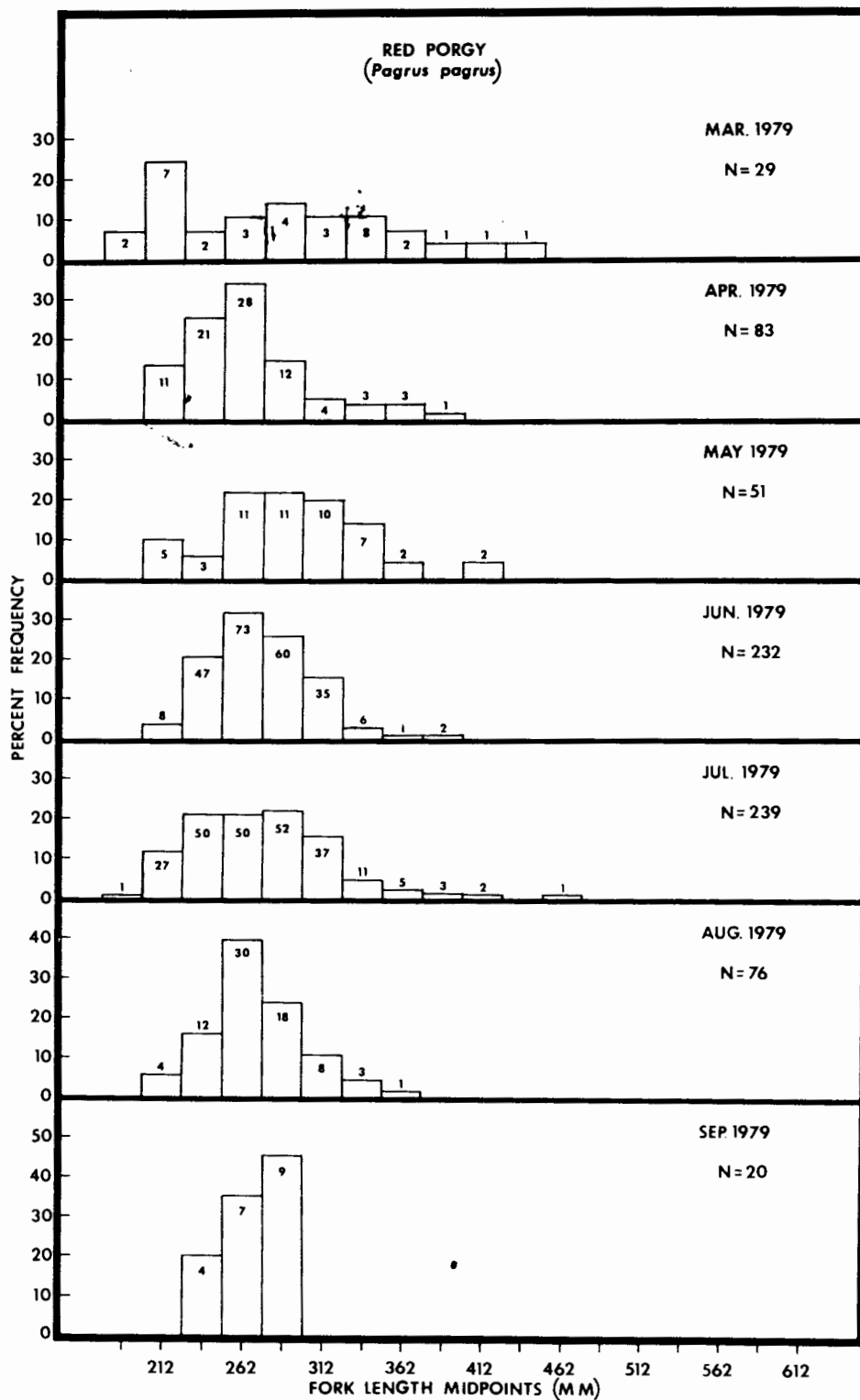


Figure 4. Length-frequency distribution of red pogy (March - September 1979).

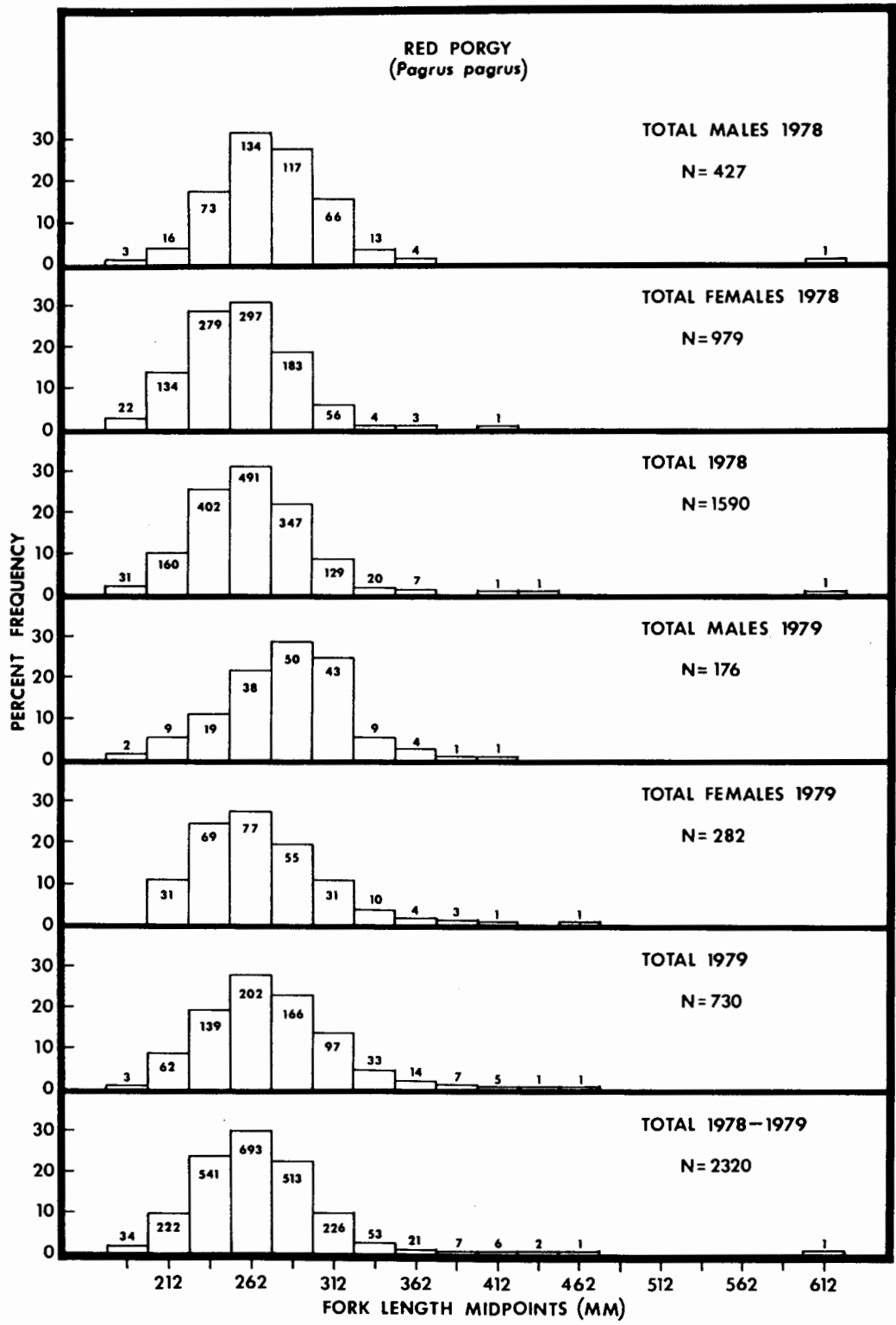


Figure 5. Length-frequency distribution of red porgy (totals by sex, totals by year, total 1978-79).

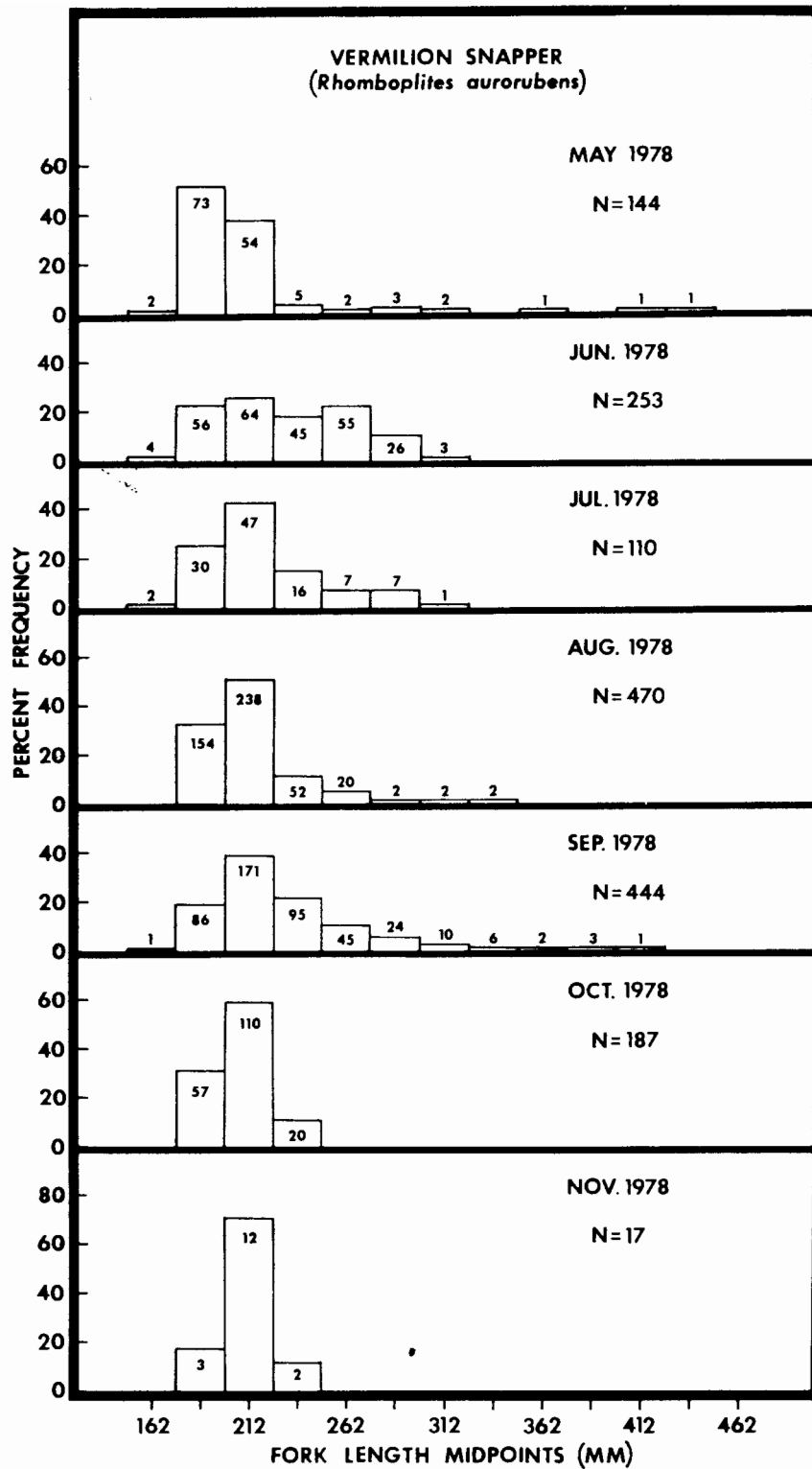


Figure 6. Length-frequency distribution of vermilion snapper (May - November, 1978).

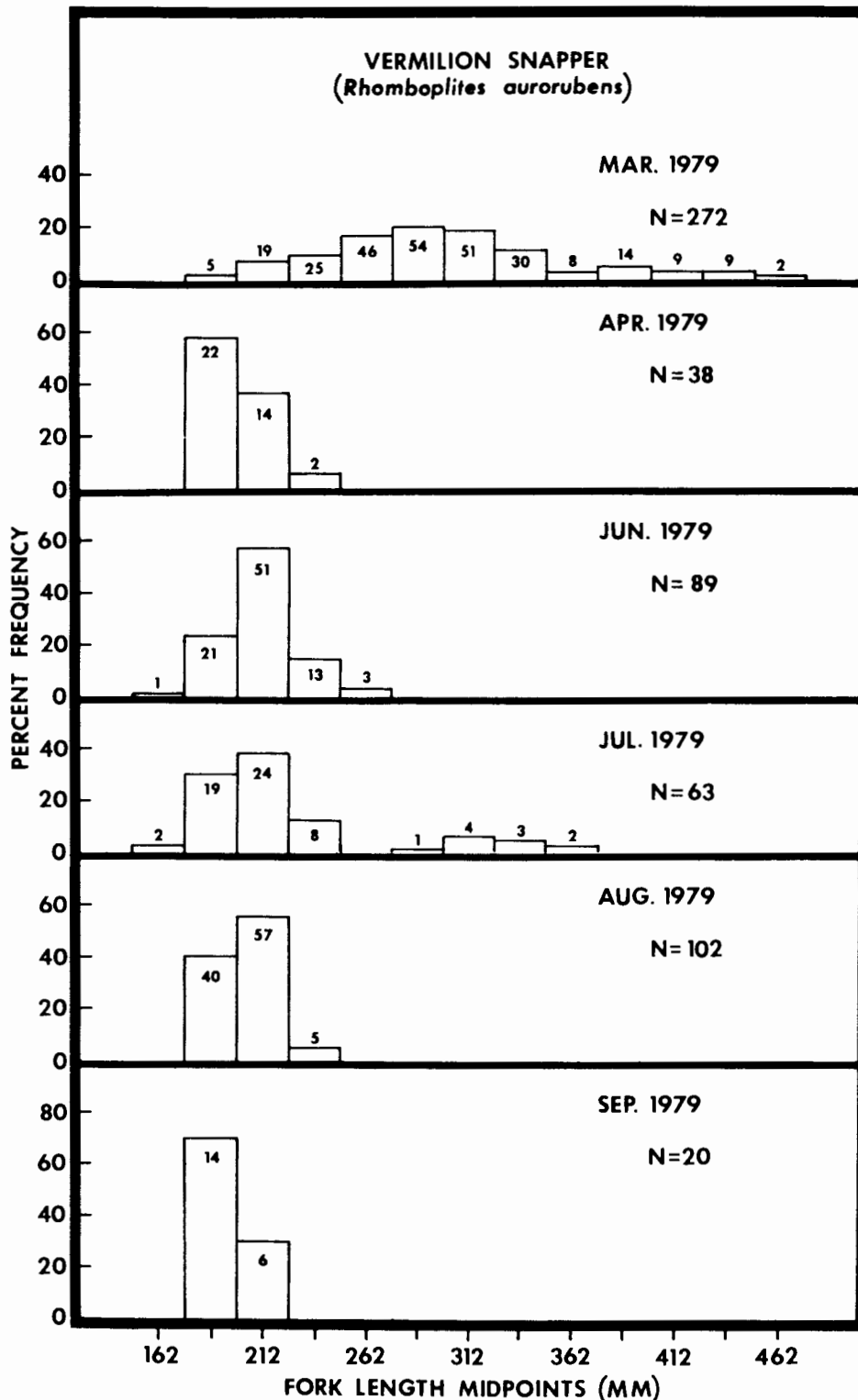


Figure 7. Length-frequency distribution of vermilion snapper (March - September 1979).

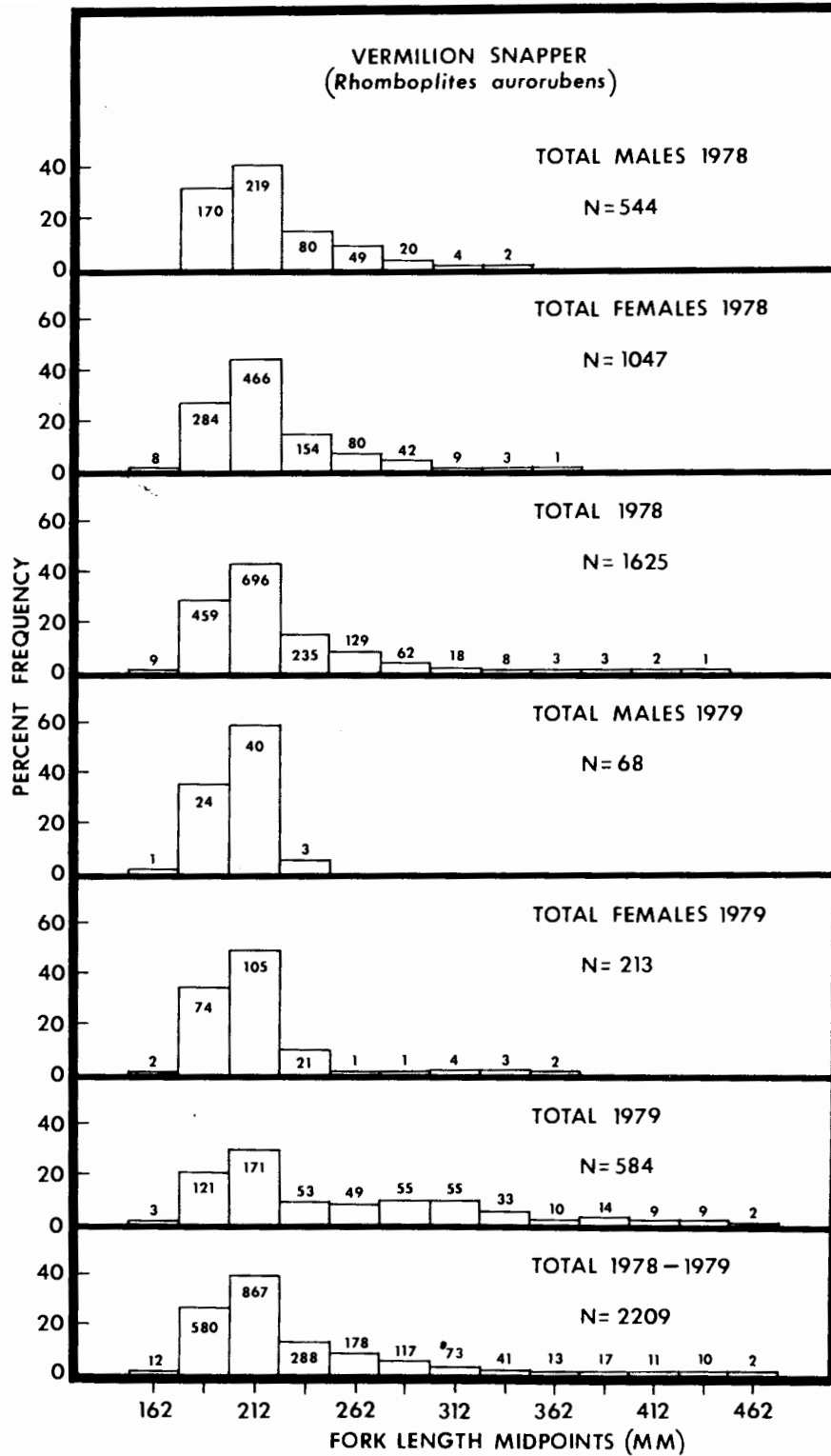


Figure 8. Length-frequency distribution of vermilion snapper (totals by sex, totals by year, total 1978-79).

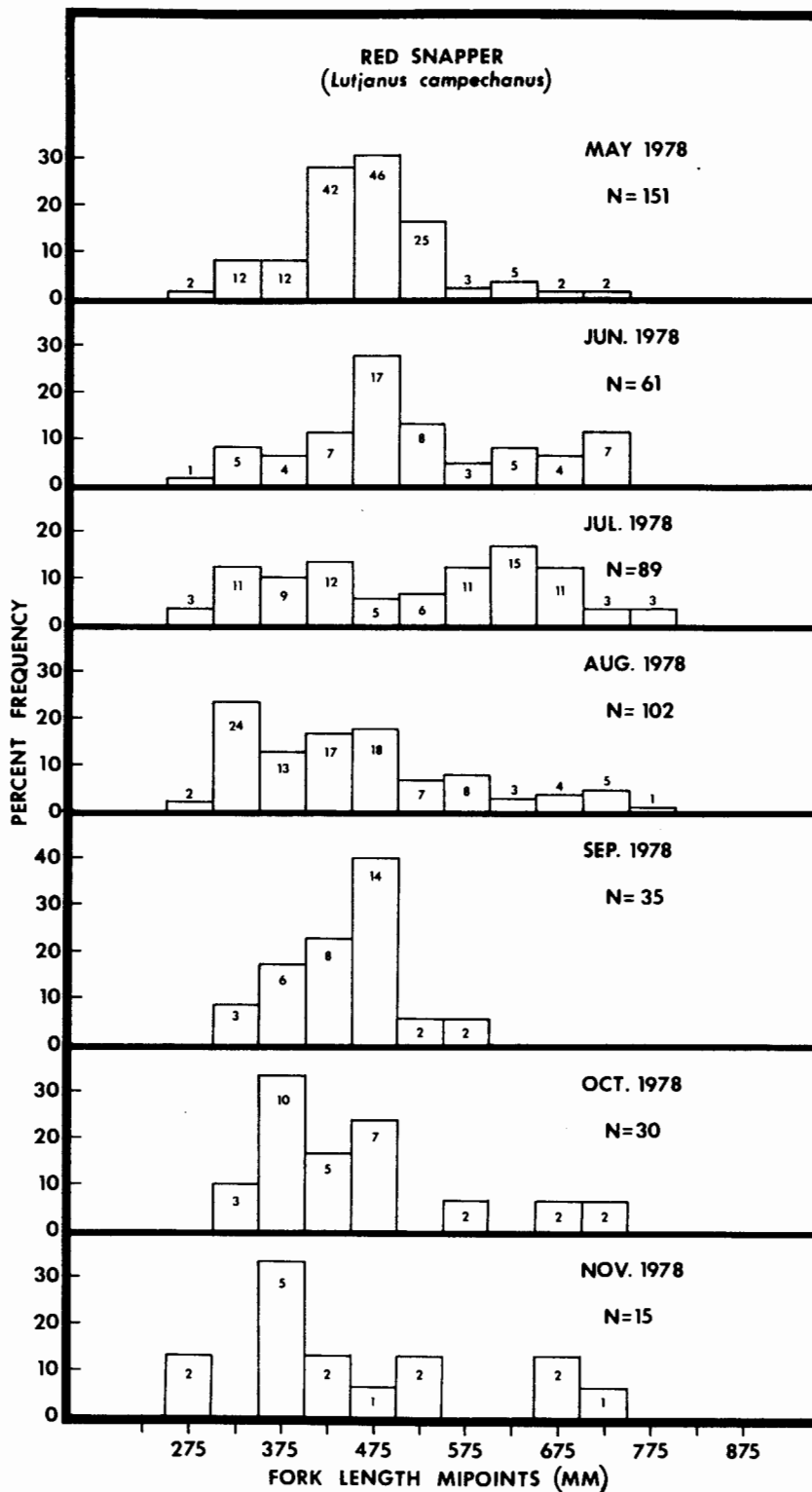


Figure 9. Length-frequency distribution of red snapper (May - November 1978).

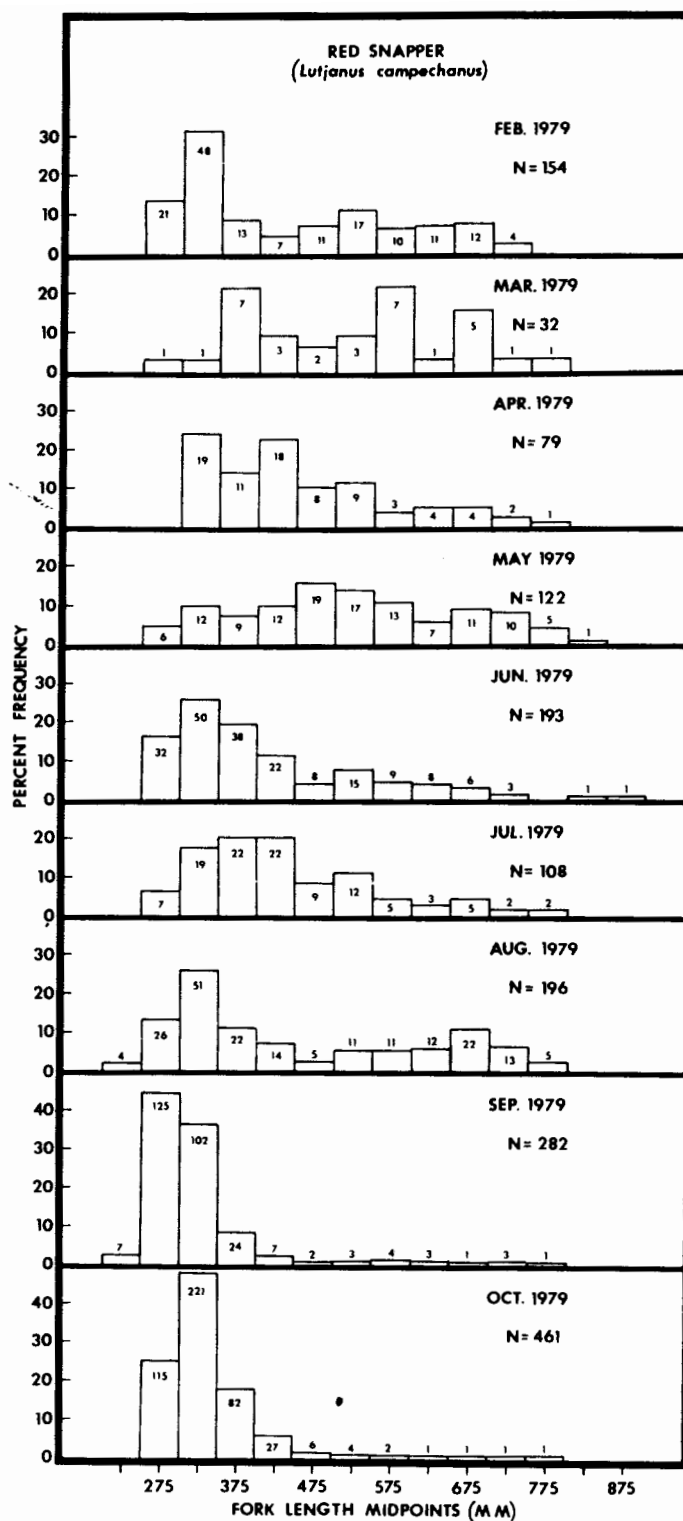


Figure 10. Length-frequency distribution of red snapper (February - October 1979).

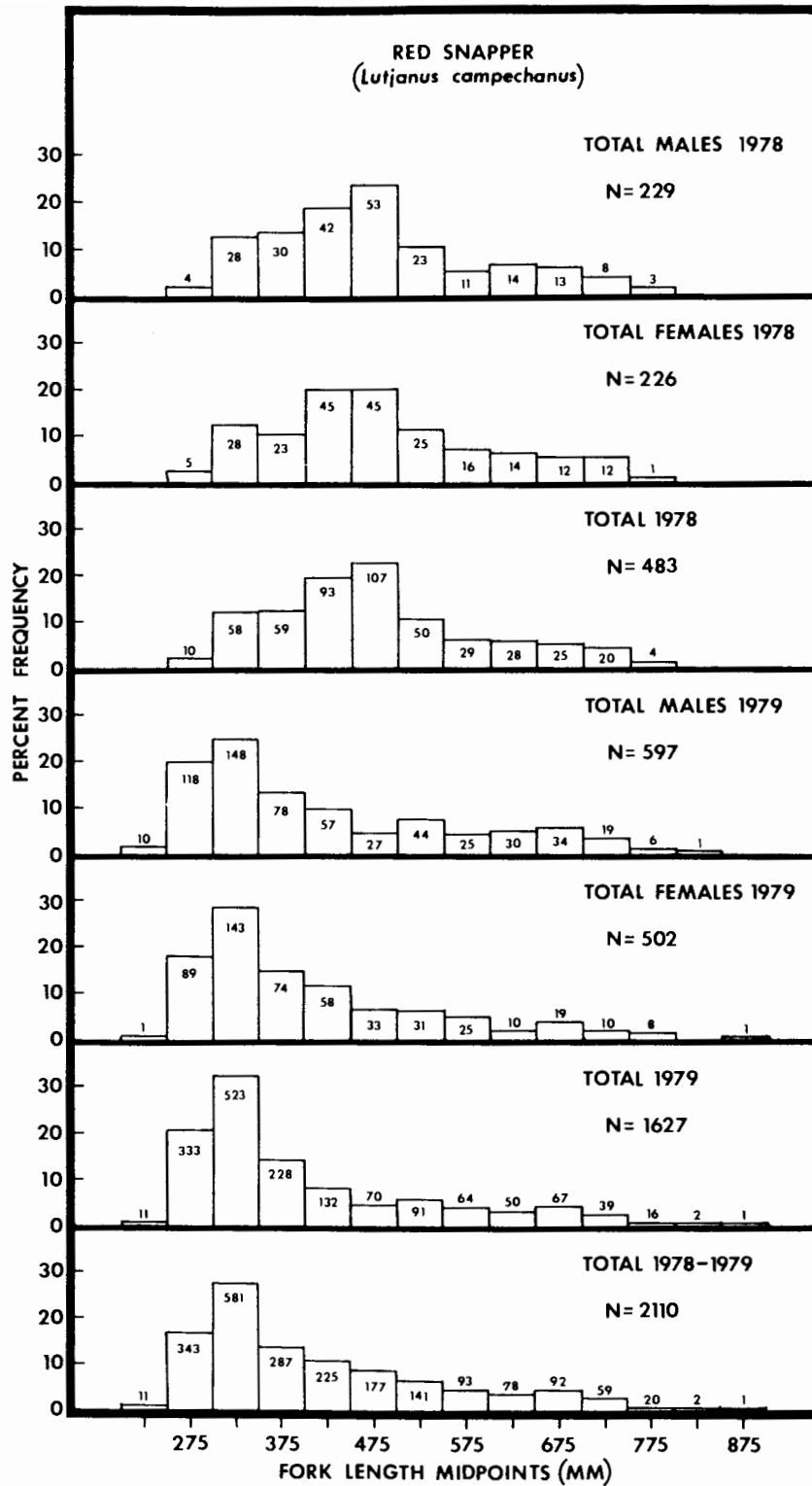


Figure 11. Length-frequency distribution of red snapper (totals by sex, totals by year, total 1978-79).

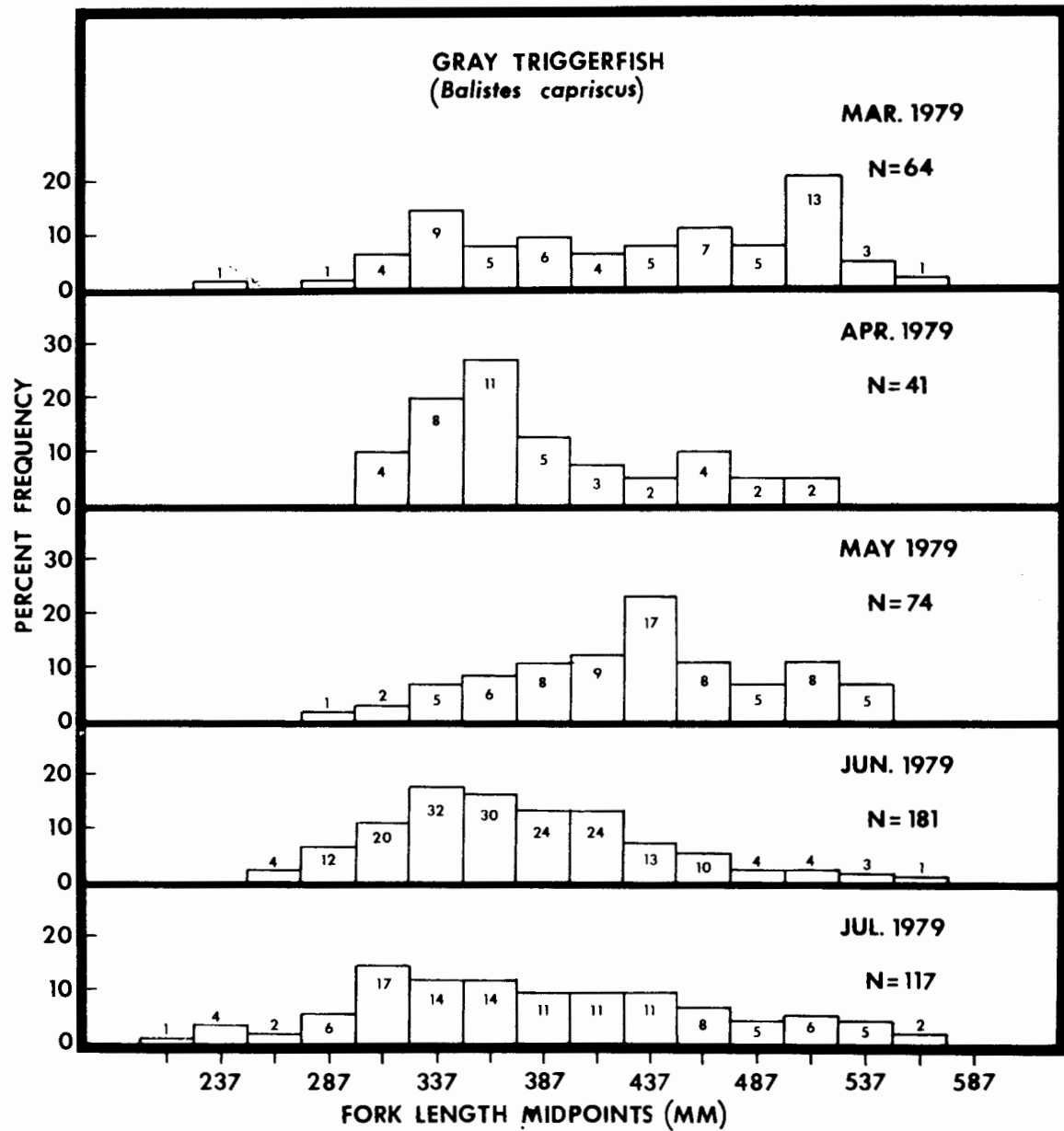


Figure 12. Length-frequency distribution of gray triggerfish (March - July 1979).

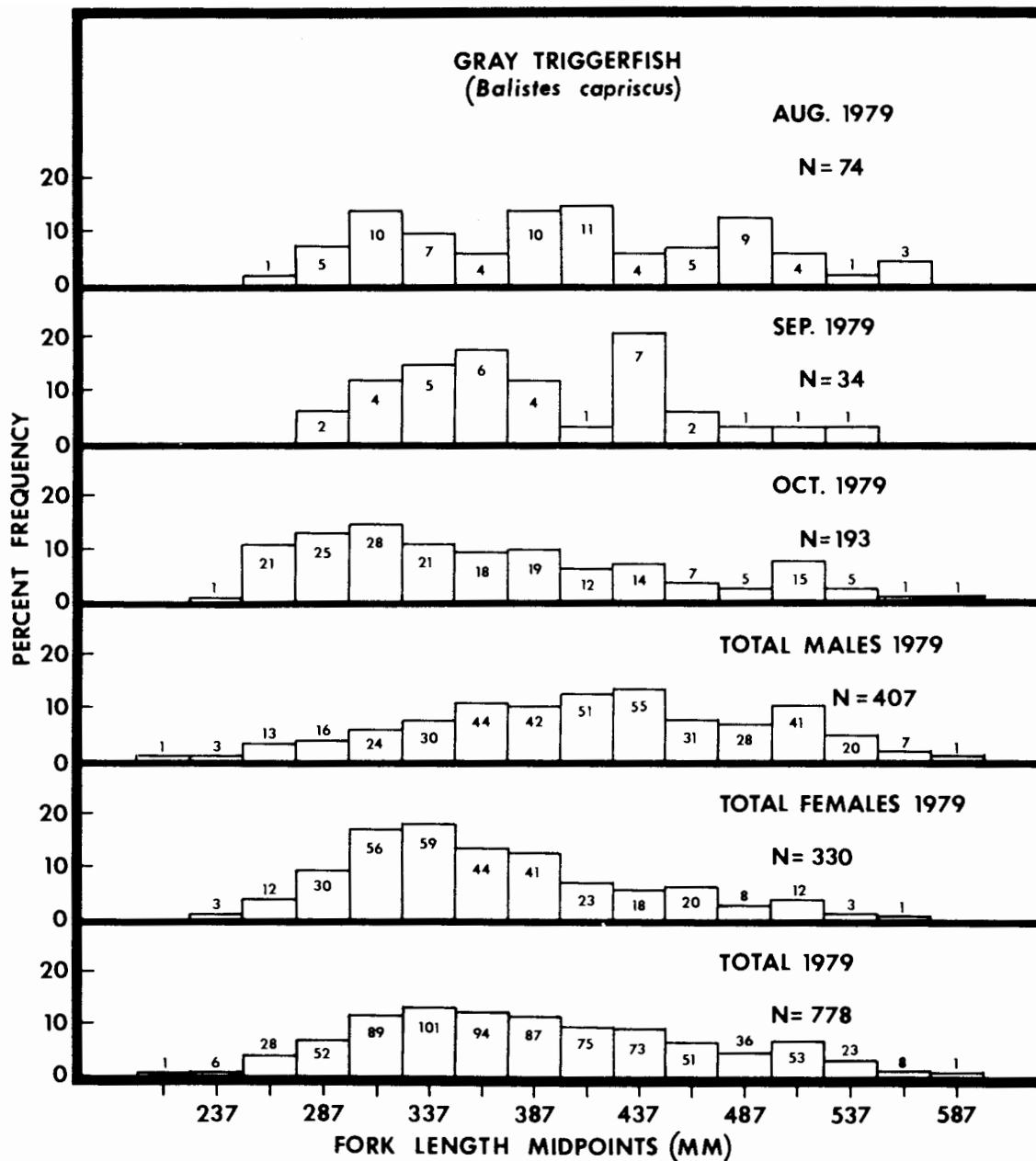


Figure 13. Length-frequency distribution of gray triggerfish (August - October 1979, totals by sex, total 1979).

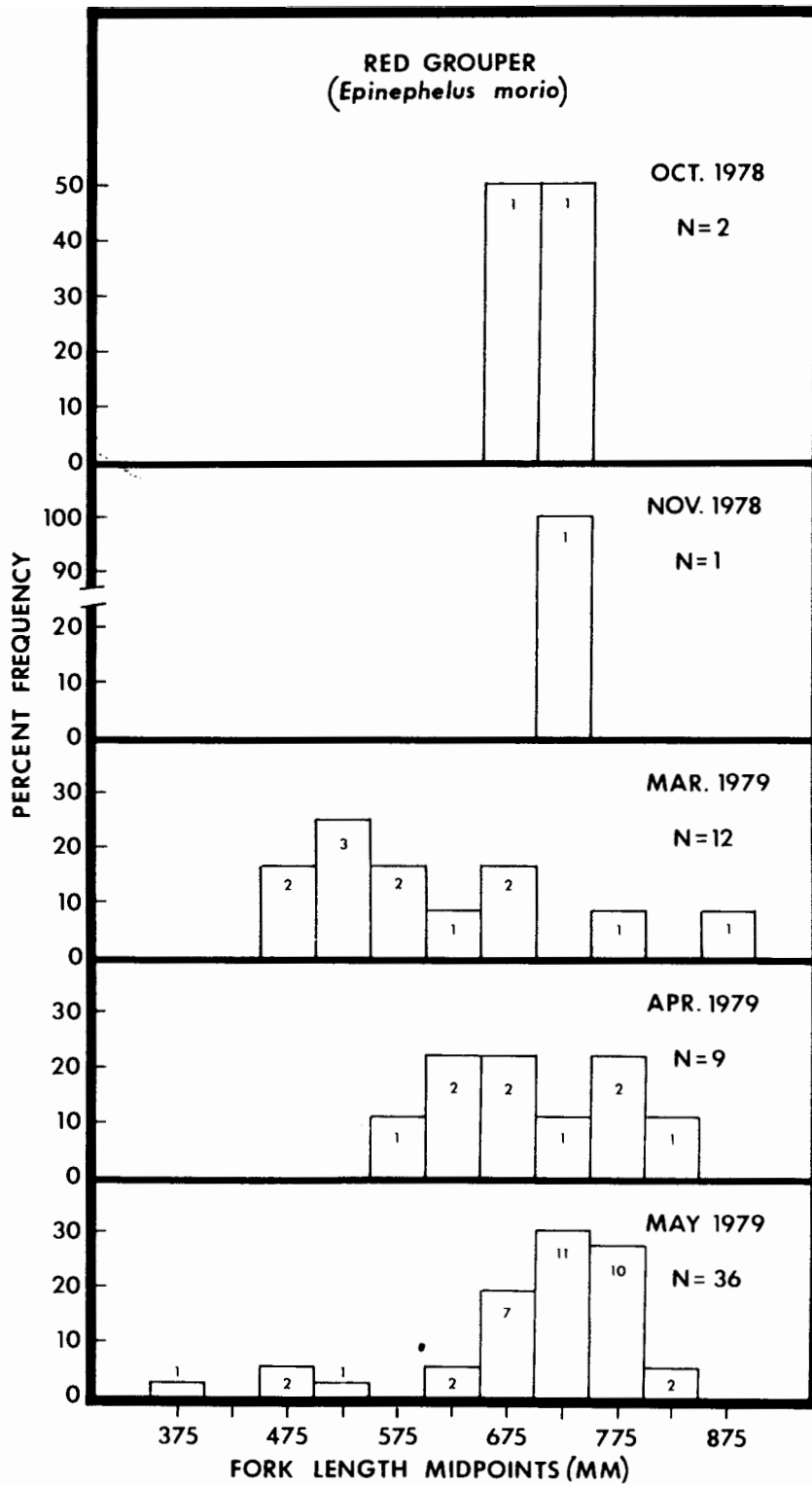


Figure 14. Length-frequency distribution of red grouper (October 1978 - May 1979).

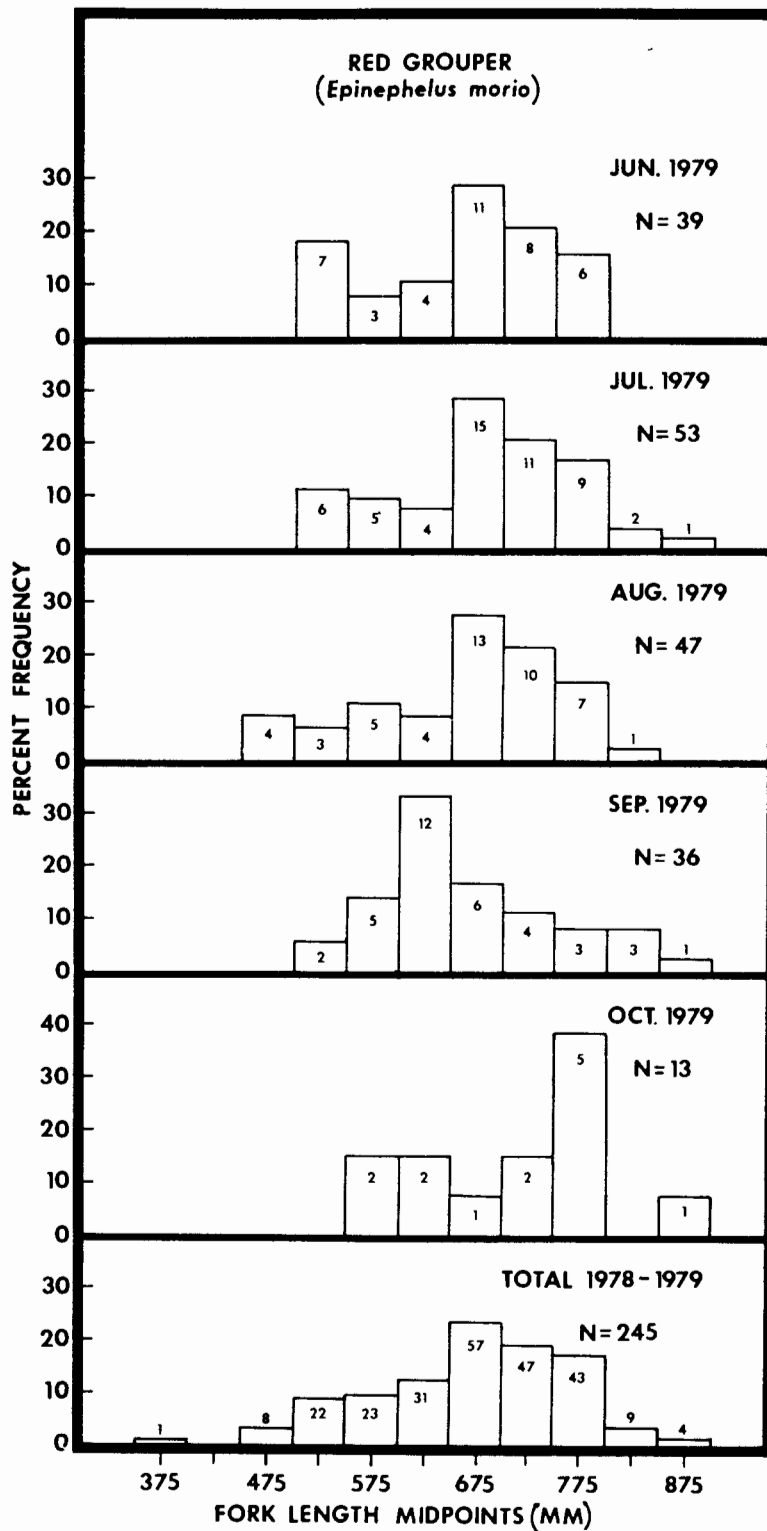


Figure 15. Length-frequency distribution of red grouper (June - October 1979, total 1978-79).

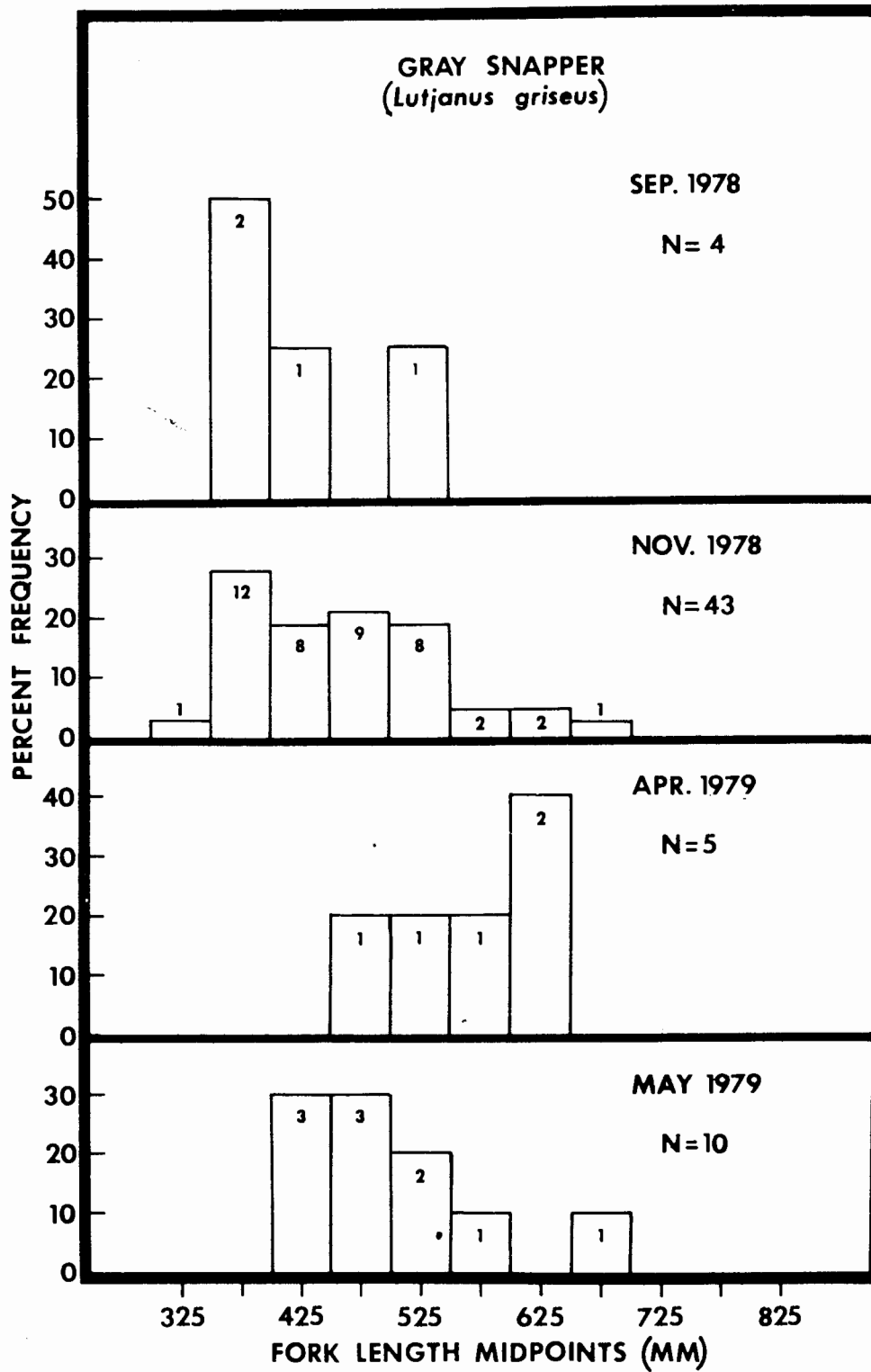


Figure 16. Length-frequency distribution of gray snapper (September 1978 - May 1979).

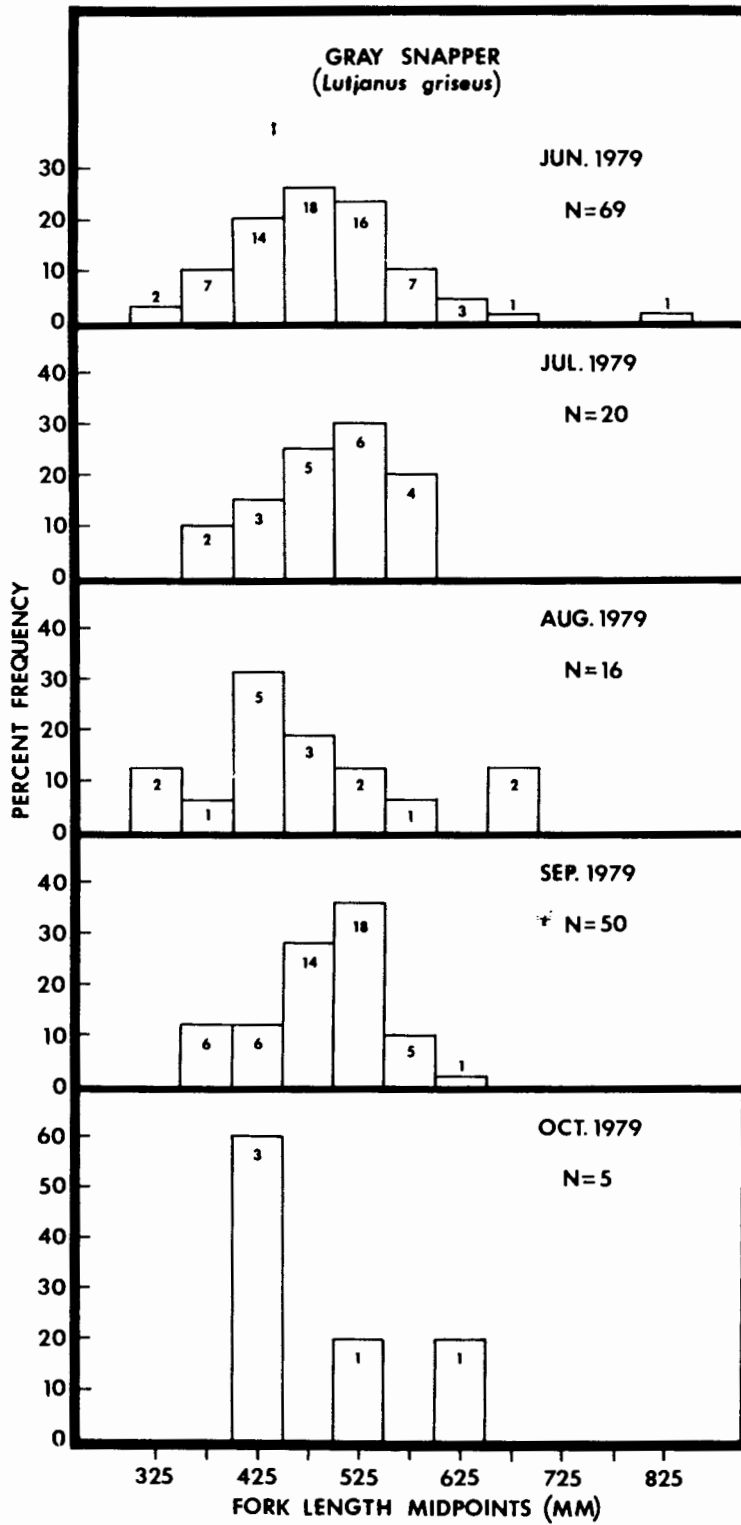


Figure 17. Length-frequency distribution of gray snapper (June - October 1979).

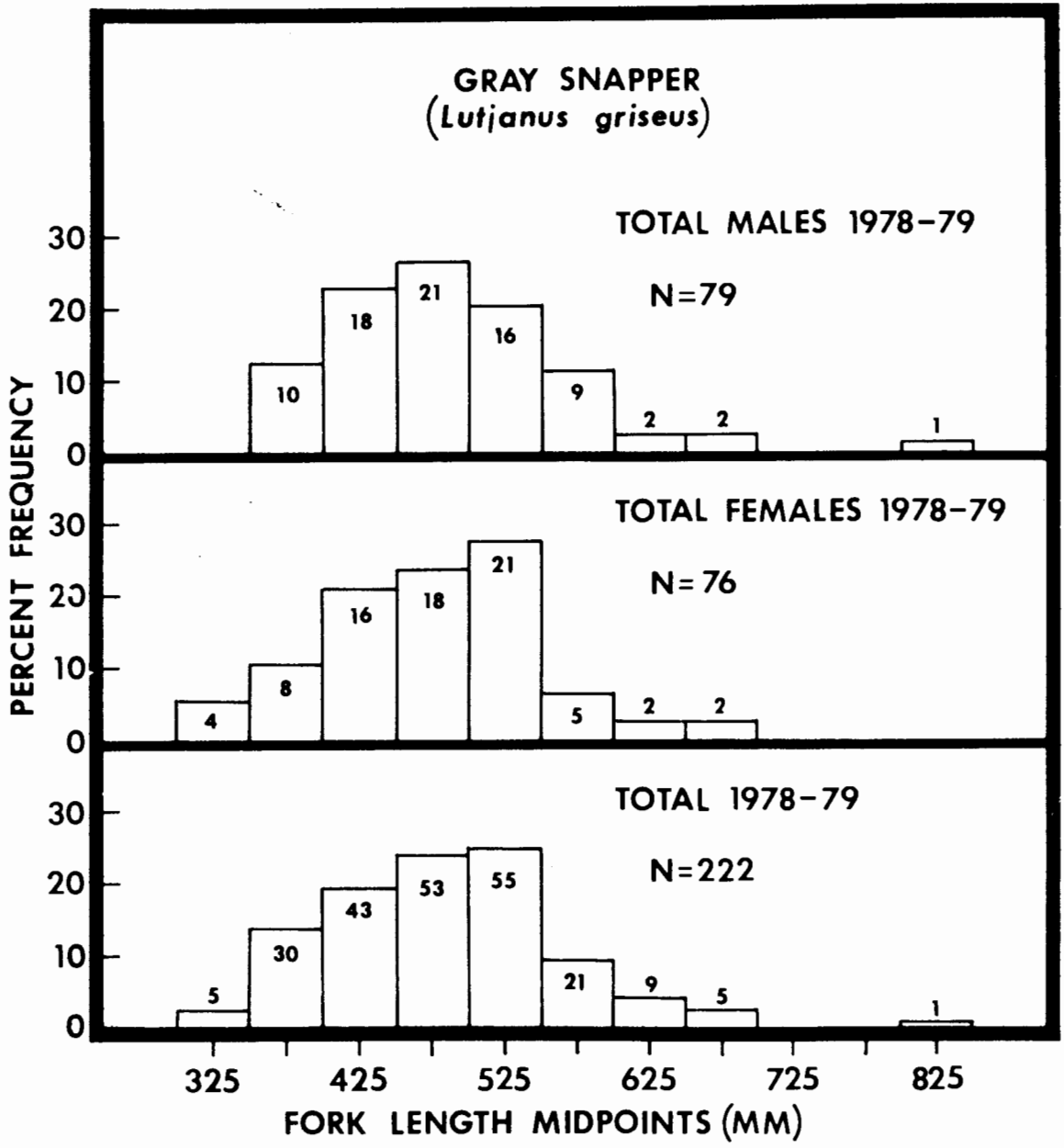


Figure 18. Length-frequency distribution of gray snapper (total males 1978-79, total females 1978-79, total 1978-79).

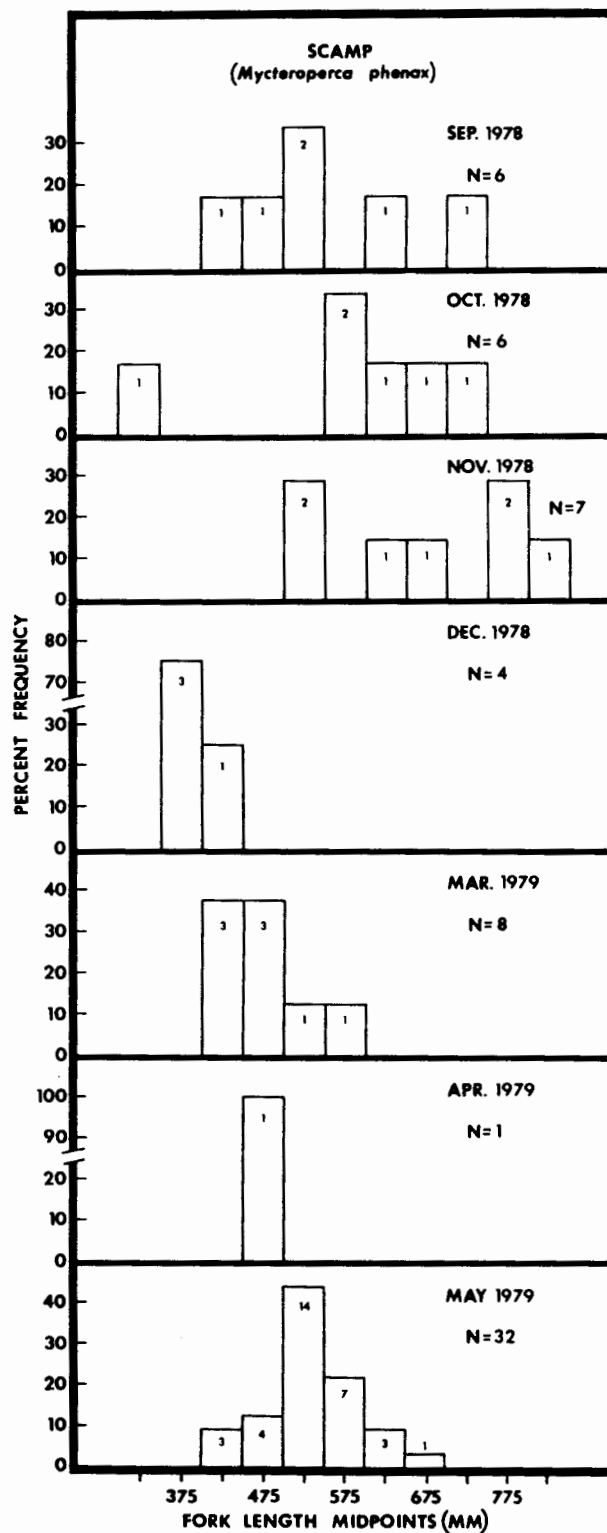


Figure 19. Length-frequency distribution of scamp (September 1978 - May 1979).

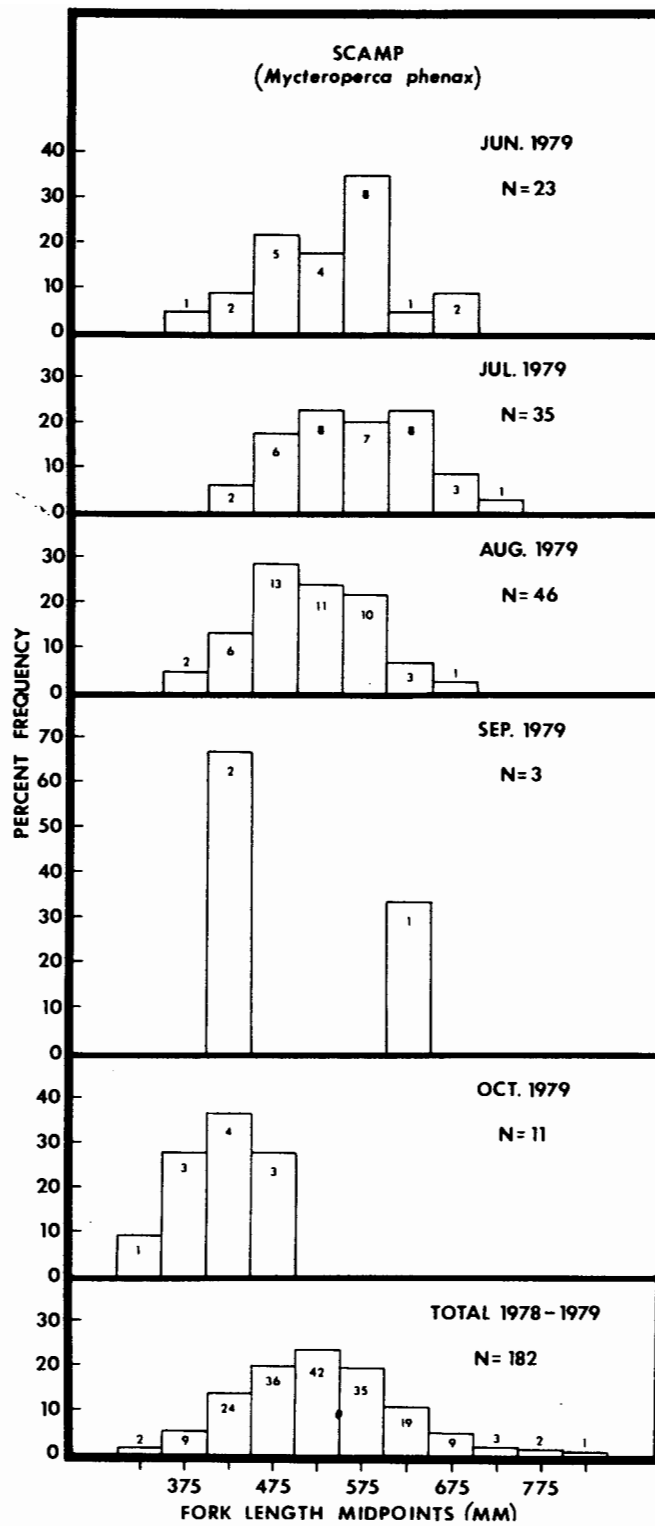


Figure 20. Length-frequency distribution of scamp (June - October 1979, total 1978-79).

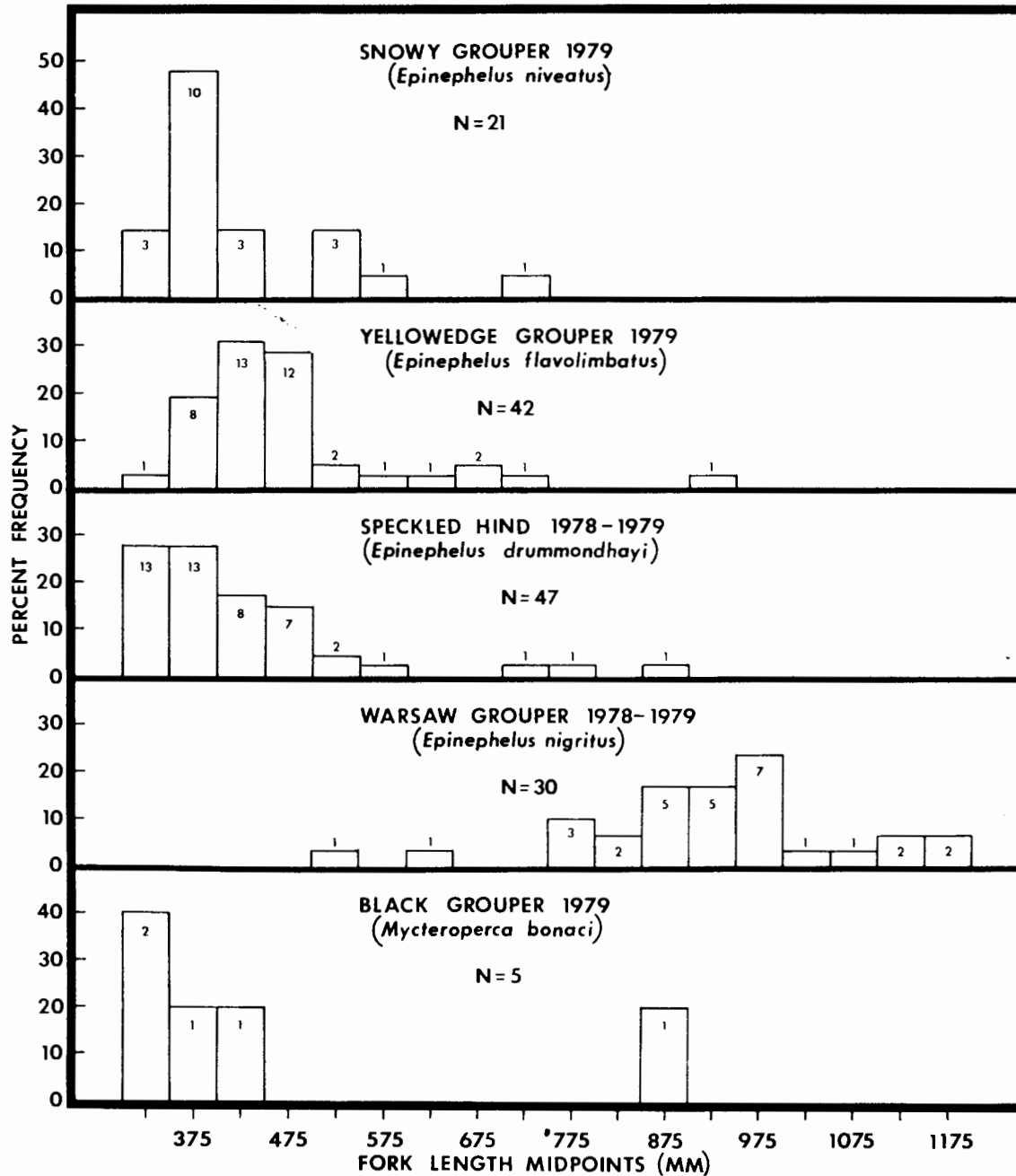


Figure 21. Length-frequency distribution of snowy grouper 1979, yellowedge grouper 1979, speckled hind 1978-79, warsaw grouper 1978-79, and black grouper 1979.