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Juvenile Finfish and Blue Crab Stock Assessment Program Bottom Trawl Survey annual data report series, volume 1991

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JUVENILE FINFISH AND BLUE CRAB STOCK ASSESSMENT PROGRAM

BOTTOM TRAWL SURVEY

ANNUAL DATA REPORT SERIES

VOLUME 1991

by

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PREFACE

This represents only the text portion of this report. The actual data portion is housed in Jefferson Hall under the supervision of the Fisheries Data Management Unit. For further information or assistance, contact Chris Bonzek or Patrick Geer.

Project Staff

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INTRODUCTION

This report presents a summary page for each tow conducted by the Virginia Institute of Marine Science, Juvenile Fish and Blue Crab Trawl Survey during 1991. The sampling methods and summarized data are presented in Bonzek et al. (1992). Data analysis and calculations of juvenile indices for selected species are presented in Colvocoresses et al. (1991). The purpose of this report is simply to provide a "hard copy" record of trawl results. It also provides a method to retrieve information about one or several particular trawls without consulting computerized archives.

All data about each tow are presented, except that length data are summarized to number measured, minimum size, maximum size, mean size, and standard error. Each page contains four major subsections: Station Data, Atmospheric and Hydrographic Data, Comments, and Catch Summary Data. Each subsection is further divided into groups of related data, such as Station Identification Data or Atmospheric Data.

In the Catch Summary Data section, species are presented in alphabetical order by common name. For nineteen species, cutoff values have been established which separate measured fish into those which we use to calculate "juvenile indices" (usually age 0 fish) and those outside the "index" range. Table 1 contains the list of species for which cutoff values have been established along with those cutoff values. For those species, the number caught of "index age" is included in the Catch Summary Data section.

Currently four major water basins are sampled in the survey, the Chesapeake Bay main stem below 37° 40' N latitude (system CL in the tables), the James River (JA), the York River (YK), and the Rappahannock River (RA). This report is divided into four major sections, one for each basin, presented alphabetically by code. Within each basin section, pages are in order of month and station identifier (the Rivmile/Station heading on each sheet). In the Chesapeake Bay the station identifier is the same as the "Station Number." In the rivers, the station identifier corresponds to river mile. During May through November in the rivers, some stations are sampled twice; the second tow being a "crab" tow in which only blue crabs are counted and measured. Each crab tow is presented immediately after its corresponding "normal" tow.

Beginning in June 1991, in the York River, a complementary survey was begun. The historical sampling sites in each river are fixed, mid-channel sites. The complementary survey is a stratified random survey of sites. Its purpose is to provide a basis for comparison with the fixed sites so that eventually the fixed station survey may be replaced with a stratified random survey. The data from this complementary survey are presented in the Appendix.

Current plans call for producing documents similar to this for each year the survey has been conducted.

REFERENCES

Bonzek, C.F., P.J. Geer, J.A. Colvocoresses, and R.E. Harris, Jr. 1992. Juvenile finfish and blue crab stock assessment program bottom trawl survey annual data summary report series. Volume 1991. Va. Inst. Mar. Sci. Spec. Sci. Rpt. No. 124. Va. Instit. Mar. Sci., Gloucester Pt. VA 23062. 213 p.

Colvocoresses, J.A., P.J. Geer., C.F. Bonzek. 1991. Estimation of Relative Abundance of Recreationally Important Finfish in the Virginia Portion of Chesapeake Bay. Annual Progress Report to U.S. Fish and Wildlife Service, Sportfish Restoration Project F104R1. Va. Instit. Mar. Sci., Gloucester Pt., Va 23602. 33 p.

Table 1. Species specific length cutoff values for determining index age fish.*

Species	Mon.	Min. Size	Max. Size
Alewife	Jun		75
	Jul		90
	Aug		110
	Sep		125
	Oct		135
	Nov		145
	Dec		150
	Jan		150
	Feb		150
	Mar		150
	Apr		160
	May		170
Bay Anchovy	Jul		44
	Aug		51
	Sep		56
	Oct		61
	Nov		65
	Dec		70
	Jan		77
	Feb		80
	Mar		80
	Apr		80
	May		80
	Jun		80
Channel Catfish	Jun		50
	Jul		80
	Aug		105
	Sep		120
	Oct		130
	Nov		130
	Dec		130
	Jan		130
	Feb		130
	Mar		130
	Apr		140
	May		150
Silver Perch	Jul		130
	Aug		150
	Sep		160
	Oct		160
	Nov		160
	Dec		160
	Jan		160
	Feb		160
	Mar		160
	Apr		160
	May		165
	Jun		170
Weakfish**	Jun		90
	Jul		120
	Aug		150
	Sep		180
	Oct		200
	Nov		200
	Dec		200
	Jan		200
	Feb		200
	Mar		200
	Apr		225
	May		240
American Shad	Jun		80
	Jul		100
	Aug		115
	Sep		130
	Oct		145
	Nov		160
	Dec		170
	Jan		170
	Feb		170
	Mar		170
	Apr		180
	May		190
Black Seabass**	Aug		70
	Sep		85
	Oct		100
	Nov		105
	Dec		110
	Jan		110
	Feb		110
	Mar		110
	Apr		110
	May		110
	Jun		150
	Jul		175
Hogchoker	Aug		40
	Sep		50
	Oct		55
	Nov		60
	Dec		60
	Jan		60
	Feb		60
	Mar		60
	Apr		64
	May		67
	Jun		70
	Jul		80
Spot**	Mar		50
	Apr		75
	May		100
	Jun		135
	Jul		160
	Aug		180
	Sep		200
	Oct		200
	Nov		200
	Dec		200
	Jan		200
	Feb		200
White Catfish	Jun		50
	Jul		65
	Aug		80
	Sep		90
	Oct		100
	Nov		110
	Dec		110
	Jan		110
	Feb		110
	Mar		110
	Apr		110
	May		120
Atlantic Croaker**	Sep		50
	Oct		80
	Nov		100
	Dec		100
	Jan		100
	Feb		100
	Mar		100
	Apr		110
	May		135
	Jun		160
	Jul		180
	Aug		220
Blackcheek Tonguefish	Aug		80
	Sep		90
	Oct		100
	Nov		110
	Dec		110
	Jan		110
	Feb		110
	Mar		110
	Apr		110
	May		115
	Jun		125
	Jul		130
Northern Puffer	Jun		50
	Jul		85
	Aug		120
	Sep		130
	Oct		135
	Nov		140
	Dec		140
	Jan		140
	Feb		140
	Mar		140
	Apr		160
	May		185
Striped Bass	May		50
	Jun		80
	Jul		100
	Aug		120
	Sep		135
	Oct		150
	Nov		175
	Dec		190
	Jan		200
	Feb		200
	Mar		200
	Apr		200
White Perch	May		35
	Jun		65
	Jul		73
	Aug		80
	Sep		85
	Oct		85
	Nov		85
	Dec		85
	Jan		85
	Feb		85
	Mar		85
	Apr		95
Atlantic Silverside	Jun		70
	Jul		80
	Aug		90
	Sep		100
	Oct		110
	Nov		120
	Dec		125
	Jan		125
	Feb		125
	Mar		130
	Apr		135
	May		140
Blueback Herring	May		50
	Jun		58
	Jul		65
	Aug		75
	Sep		90
	Oct		100
	Nov		110
	Dec		110
	Jan		110
	Feb		110
	Mar		110
	Apr		120
Scup**	May	35	90
	Jun	40	100
	Jul	50	125
	Aug	60	145
	Sep	75	160
	Oct	85	170
	Nov	90	170
	Dec	90	170
	Jan	90	170
	Feb	90	170
	Mar	90	170
	Apr	90	170
Summer Flounder**	Mar		60
	Apr		100
	May		140
	Jun		170
	Jul		200
	Aug		225
	Sep		250
	Oct		275
	Nov		290
	Dec		290
	Jan		290
	Feb		290

* Where no minimum size value is presented, the minimum size is zero.

** For species for which recruitment indices are reported in Colvocoresses et al. (1991), the "boxed" months are those used for indices.