Final Product

VA Coastal Resources Mgt. Program

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Development of "No Discharge" Zones in Virginia Tidal Waters Phase I

Prepared By

Center for Coastal Management and Policy
Virginia Institute of Marine Science
School of Marine Science
College of William and Mary
Gloucester Point, Virginia

Prepared For

Virginia Council on the Environment
Virginia Coastal Resource Management Program
Grant No. NA170Z0359-01

March 1993

ccmap
center for coastal management and policy

Comprehensive Coastal Inventory cci

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DEVELOPMENT OF "NO DISCHARGE" ZONES IN VIRGINIA TIDAL WATERS - PHASE 1

Prepared by the Center for Coastal Management and Policy
Virginia Institute of Marine Science

INTRODUCTION

The Commonwealth of Virginia currently has no regulations in effect to restrict the discharge of waste from vessels in state waters. This poses concern as Virginia continues its efforts to improve water quality in the Chesapeake Bay. The degradation of critical environmental habitat is accelerated by the introduction of waste, which in turn threatens the ecological, aesthetic, and commercial values of Virginia's waters.

The purpose of this project is two-fold. First a comprehensive review of regulatory statutes in states enforcing "no discharge" zones (NDZ) was conducted. This product is delivered as a separate document. Second, a large-scale inventory of environmentally sensitive areas for consideration in the delineation of "no discharge" zones within Chesapeake Bay waters has been produced. A large digital database was generated at the Comprehensive Coastal Inventory (CCI) Facility at the Virginia Institute of Marine Science (VIMS). The database includes several valuable inventories which historically have been archived as hardcopy maps. This effort developed methodologies to transfer these data to digital format. The database has been designed in an Arc/Info Geographic Information System (GIS) format. A description of the database layout, data sources, and coverages is presented. The development of the NDZ database is viewed by the Center for Coastal Management and Policy as Phase 1 in a series of anticipated activities which will ultimately provide the necessary resources to implement management policy in this area.

DATA SOURCES

Several different data sources were used to generate the NDZ database. The principal data source was the Environmental Sensitivity Map Atlas (ESI) for the Commonwealth of Virginia. This atlas was produced by VIMS under contract with the National Oceanic and Atmospheric Administration (NOAA) with the objective of providing oil spill response teams with guidance regarding the location of environmentally sensitive regions in the Bay. The objectives of this exercise are similar in its intent to identify areas within the Bay where the addition of pollutants; in this case human waste and sewage, poses a potential threat to viable natural resources. Therefore, the ESI Atlas provided a comprehensive source of data to address the needs of this project.

Several problems which exist with the ESI Atlas should be noted. First, the delineations of the various groups, species, and habitats identified were subjective. While experts in the respective fields were consulted, the actual mapping exercise was never verified, and the ability to map with any geographic accuracy was not available at the time. Second, minimum quality assurance and quality control measures were exercised in the original product. In particular, a

user will find that data does not flow logically across contiguous topographic boundaries. This suggests that the maps were never edge-matched to evaluate continuity or correctness in the plotted elements. The data presented should be viewed as a general representation of the possible natural resources which existed at the time the Atlas was published.

The Center for Coastal Management and Policy (CMAP) recognizes the value of this inventory, but also acknowledges the limitations for its use in its current state. It is the intent of this Program to update the database with the assistance of researchers and scientists at VIMS. This activity, however, is far beyond the scope of the current NDZ project, and will be conducted at a later date with time and funding availability. Therefore, the digital data generated for this project represents the same data illustrated on the ESI Atlas maps. No attempt has been made to update or refine the data.

The Virginia Department of Health, the Chesapeake Bay Program's Chesapeake Bay Area Public Access Plan, and the ESI Atlas provided data for the regions marinas and marinas with pump-out facilities. The 1991 data from the Department of Health, who monitors these facilities, is considered to be the most reliable data source. This data list is currently being updated by the Department of Health. They were consulted on several occasions to answer questions and provide locational information.

The VIMS Tidal Wetlands Inventory Series which is now available in digital format for most of Virginia's tidal waters is considered the most comprehensive digital database for tidal wetlands information. This database was transferred to digital format as a component of the ongoing activities of the CCI Program at VIMS. The data has been transferred to the EcoMAPS Program at the Virginia Council on the Environment.

The Submerged Aquatic Vegetation (SAV) Distribution and Abundance Survey, conducted by the Sea Grass Program in the Department of Biological Sciences at VIMS, is considered a reliable and up-dated source of information regarding the location of SAV beds within the Chesapeake Bay. This is an important Bay resource to consider when evaluating areas sensitive to sewage disposal. This program is funded by the Environmental Protection Agency, and the database is available through the EcoMAPS Program.

DATA TRANSFER

Data collected from the various sources listed above were drafted on stable-base, mylar USGS 7.5 minute topographic maps. These maps have a scale of 1:24,000 (1 inch = 2,000 feet). Reported accuracy of these base maps is +/- 30 feet. The scale of the maps is equivalent to the scale of the originally mapped ESI Atlas maps.

A detailed and complex coding system was designed to facilitate an organized and accurate transfer of data from the Atlas maps to the topographic base maps. Each base map was checked prior to digitizing to ensure completeness in the data transfer. The digital record, once generated, was again checked for correctness and consistency.

NDZ COVERAGES

In addition to the SAV and Tidal Wetlands data, stored as separate databases, the following coverages have been developed specifically for this project. Most of the biological and socioeconomic data constituents were gathered from the NOAA ESI Map Atlas. Information for marinas with pump-out facilities was collected principally from the Virginia Department of Health.

Coverages related to the biological components within the Chesapeake Bay include: identification of shellfish beds, identification of common local waterfowl, shorebirds, finfish, reptiles, invertebrates, nesting areas and nursery grounds. The primary groups to be covered are listed in Table 1. Where possible, representatives of these groups are coded to the species level and referenced to a principal species index table (Appendix 2) derived from the ESI Atlas. The identification of rare, threatened and endangered species is also provided. Since several species occur seasonally in the Bay, seasonality is included where appropriate.

Socioeconomic coverages addressed have been gathered from the ESI Atlas. They include: parks and public beaches, ecological refuges, preservation areas, and archaeological sites. Public and private marinas are included and those sites which have pump-out facilities will be identified.

GEOGRAPHIC COVERAGE

Geographic coverage for the identification of "no discharge" zones within Tidewater Virginia includes 104 USGS Topographic Quadrangles. These maps incorporate the Eastern and Western shores of the Chesapeake Bay, the shorelines of waterways contiguous to the Bay, and the Atlantic coastline in Virginia. Table 2 lists the topographic quadrangle and gives both the ESI and VIMS map identification number. Figure 1 references the ESI map identification number (Table 2) to illustrate the location of each quadrangle. Figure 2 illustrates the same regional breakdown of quadrangles but uses the VIMS map identification numbers as reference. Here, the first two digits in the map index number equals the first two digits along the line of longitude, and the last two digits in the map index number equals the first two digits of the intersecting line of latitude which forms the lower left corner of the quadrant.

DATABASE DESIGN

The No Discharge Zone (NDZ) database has been designed in an Arc/Info GIS format. The database design was developed at the CCI laboratory and beta tested before production digitizing began. The characteristics of the ESI maps dictated that the structure and hierarchy of the NDZ database be extremely complicated. Figure 3 illustrates the general database hierarchy of the various elements included. Two different types of coverages exist: point/line and polygon. Many of the data elements (i.e. items) addressed can be represented as a point, a

TABLE 1. ENVIRONMENTAL CONSIDERATIONS PRINCIPAL CATEGORIES AND GROUPS

BIRDS Dabbling Ducks Diving Ducks Sea Ducks Geese and Swans Rails Raptors Wading Birds Diving Birds Shore Birds Gulls and Terns Ancillary Nesting Areas	**INVERTEBRATES** Oysters Clams Crabs Scallops Shrimp **VEGETATION** Tidal Wetlands Submerged Aquatic Vegetation
FINFISH Nursery Fish Anadromous Fish Estuarine **AMPHIBIANS** Turtles Alligators	**SOCIOECONOMIC** Public/Private Marinas Marinas w/ Pump-out Facilities Archaeological Sites Boat Ramps Parks and Public Beaches Ecological Areas: Reserves

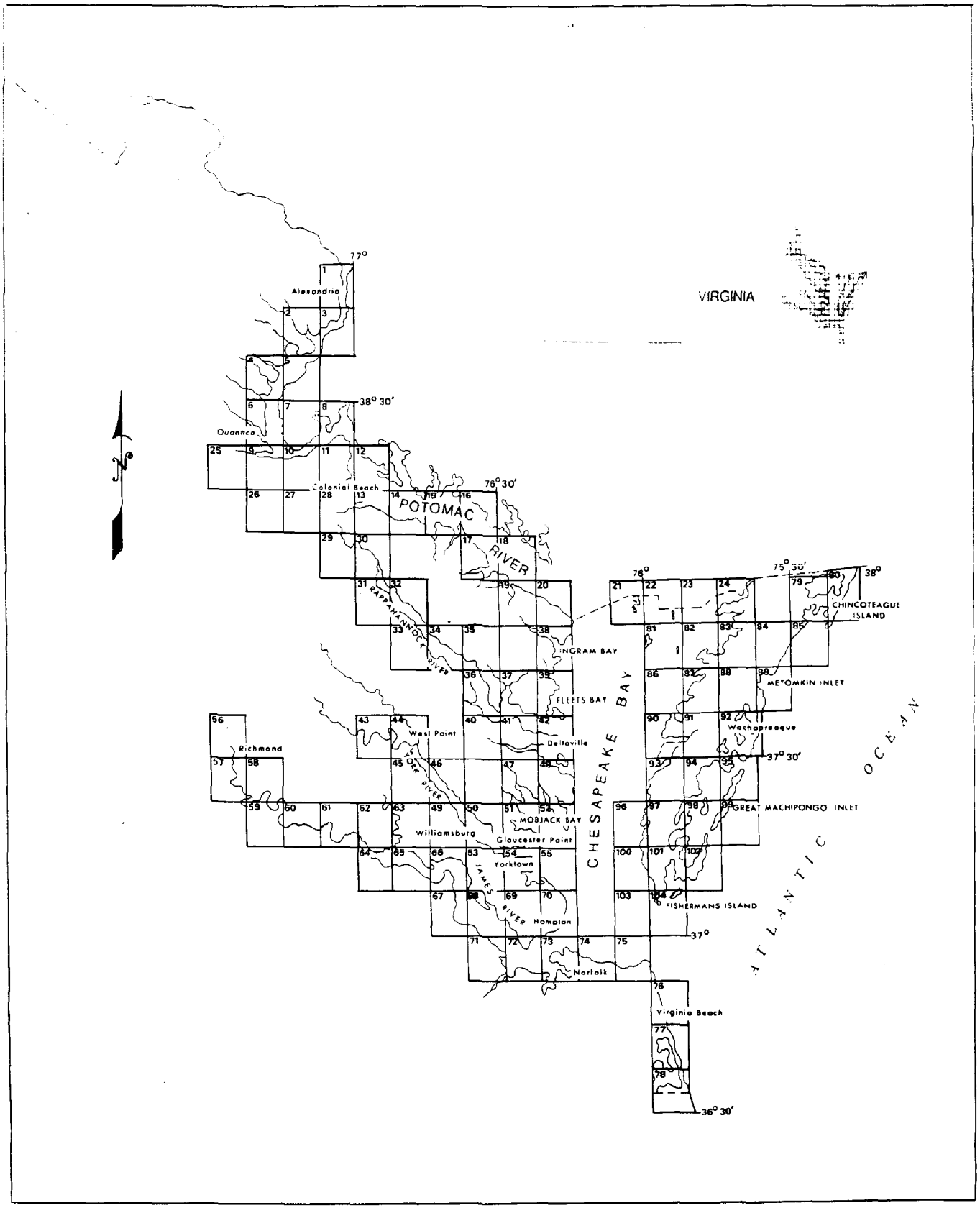
TABLE 2. TABLE OF GEOGRAPHIC COVERAGE

USGS QUADRANGLE	ESI MAP ID	VIMS MAP ID
Accomac	88	6510
Achilles	51	5907
Alexandria	1	5419
Bacons Castle	67	5705
Benns Church	71	5804
Bloxom	84	6611
Brandon	62	5507
Burgess	20	6012
Cape Charles	96	6207
Cape Henry	75	6204
Champlain	30	5513
Charles City	61	5407
Cheriton	97	6307
Chesapeake Channel	103	6205
Chesconessex	82	6411
Chincoteague East	80	6812
Chincoteague West	79	6712
Claremont	64	5506
Clay Bank	50	5807
Cobb Island	98	6407
Colonial Beach North	12	5515
Colonial Beach South	13	5514
Crisfield	23	6412
Dahlgren	11	5415
Deltaville	42	6009
Drewrys Bluff	57	5108
Dunnsville	33	5611
Dutch Gap	58	5208
Elliotts Creek	100	6206
Ewell	21	6212
Exmore	91	6409
Fishermans Island	104	6305
Fleets Bay	39	6010
Fort Belvoir	2	5318
Franktown	93	6308
Fredericksburg	25	5115
Great Fox Island	22	6312
Great Machipongo Inlet	99	6507
Gressitt	46	5708

USGS QUADRANGLE	ESI MAP ID	VIMS MAP ID
Hampton	70	6005
Heathsville	19	5912
Hog Island	66	5706
Hopewell	59	5207
Indian Head	5	5317
Irvington	37	5910
Jamesville	90	6309
King George	10	5315
Kinsale	17	5813
Knotts Island	78	6301
Little Creek	74	6104
Lively	35	5811
Loretto	29	5413
Mathews	48	6008
Mathias Point	8	5416
Metomkin Inlet	89	6610
Morattico	34	5711
Mount Landing	31	5512
Mount Vernon	3	5418
Mulberry Island	68	5805
Nandua Creek	86	6310
Nanjemoy	7	n/a
Nassawadox	94	6408
New Kent	43	5509
New Point Comfort	52	6007
Newport News North	69	5905
Newport News South	72	5904
Norfolk North	73	6004
Norge	63	5607
North Bay	77	6302
Parksley	83	6511
Passapatanzy	9	5215
Piney Point	16	5814
Poquoson East	55	6006
Poquoson West	54	5906
Port Royal	27	5314
Pungoteague	87	6410
Quantico	4	5217
Quinby Inlet	95	6508
Rappahannock Academy	26	5214
Reedville	38	6011
Richmond	56	5109

USGS QUADRANGLE	ESI MAP ID	VIMS MAP ID
Rollins Fork	28	5414
St. Clements Island	15	5714
St. George Island	18	5913
Saluda	40	5809
Saxis	24	6512
Ship Shoal Inlet	102	6406
Smithfield	n/a	6112
Stratford Hall	14	5614
Surry	65	5606
Tangier Island	81	6311
Tappahannock	32	5612
Toano	45	5608
Townsend	101	6306
Urbanna	36	5810
Virginia Beach	76	6303
Wachapreague	92	6509
Wallops Island	85	6711
Ware Neck	47	5908
West Point	44	5609
Westover	60	5307
Widewater	6	5216
Williamsburg	49	5707
Wilton	41	5909
Yorktown	53	5806

Figure 1. ESI Map Index



LOCATION KEY
FOR VIRGINIA ESI MAPS

Figure 2. VIMS Map Index

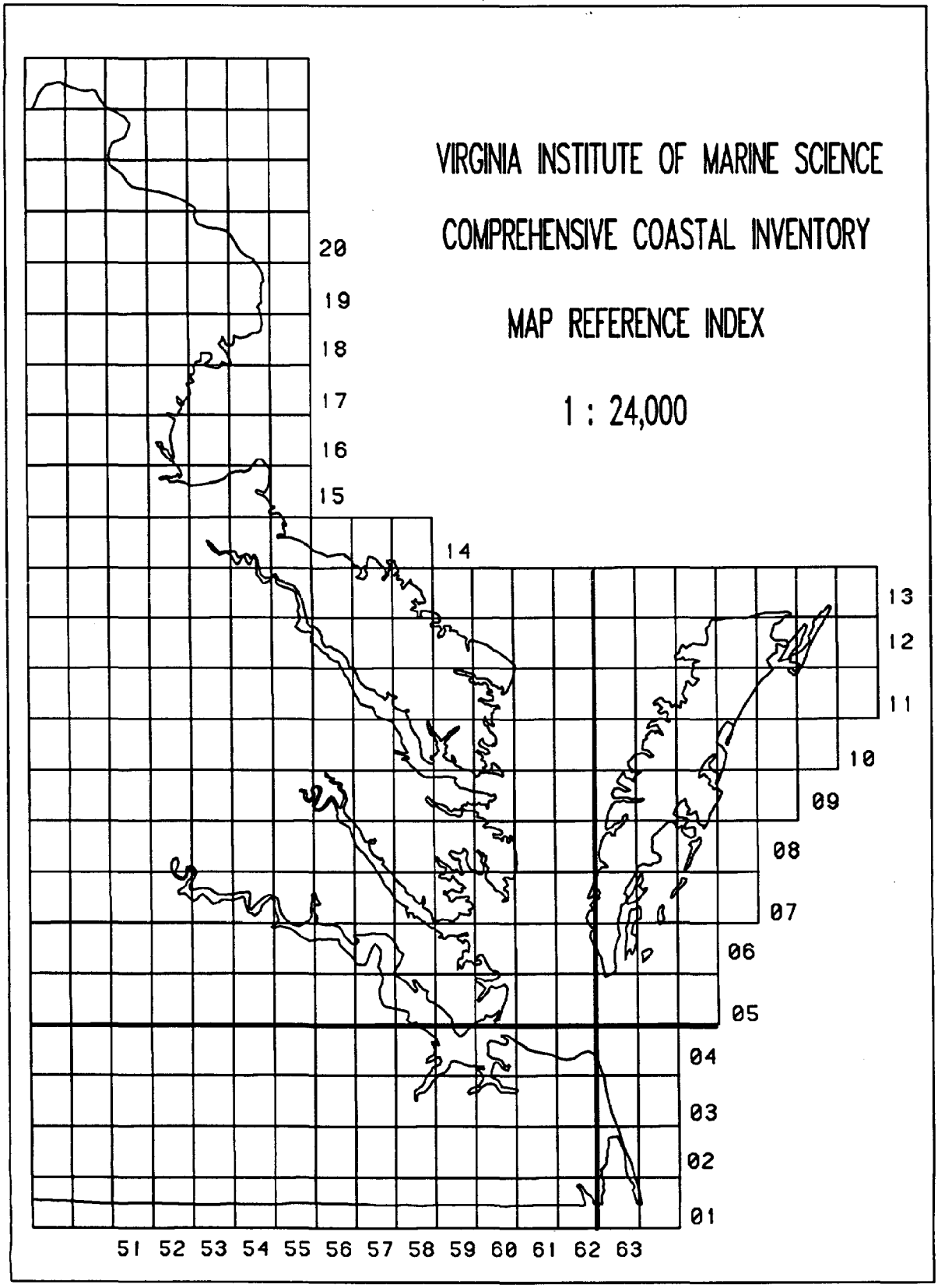
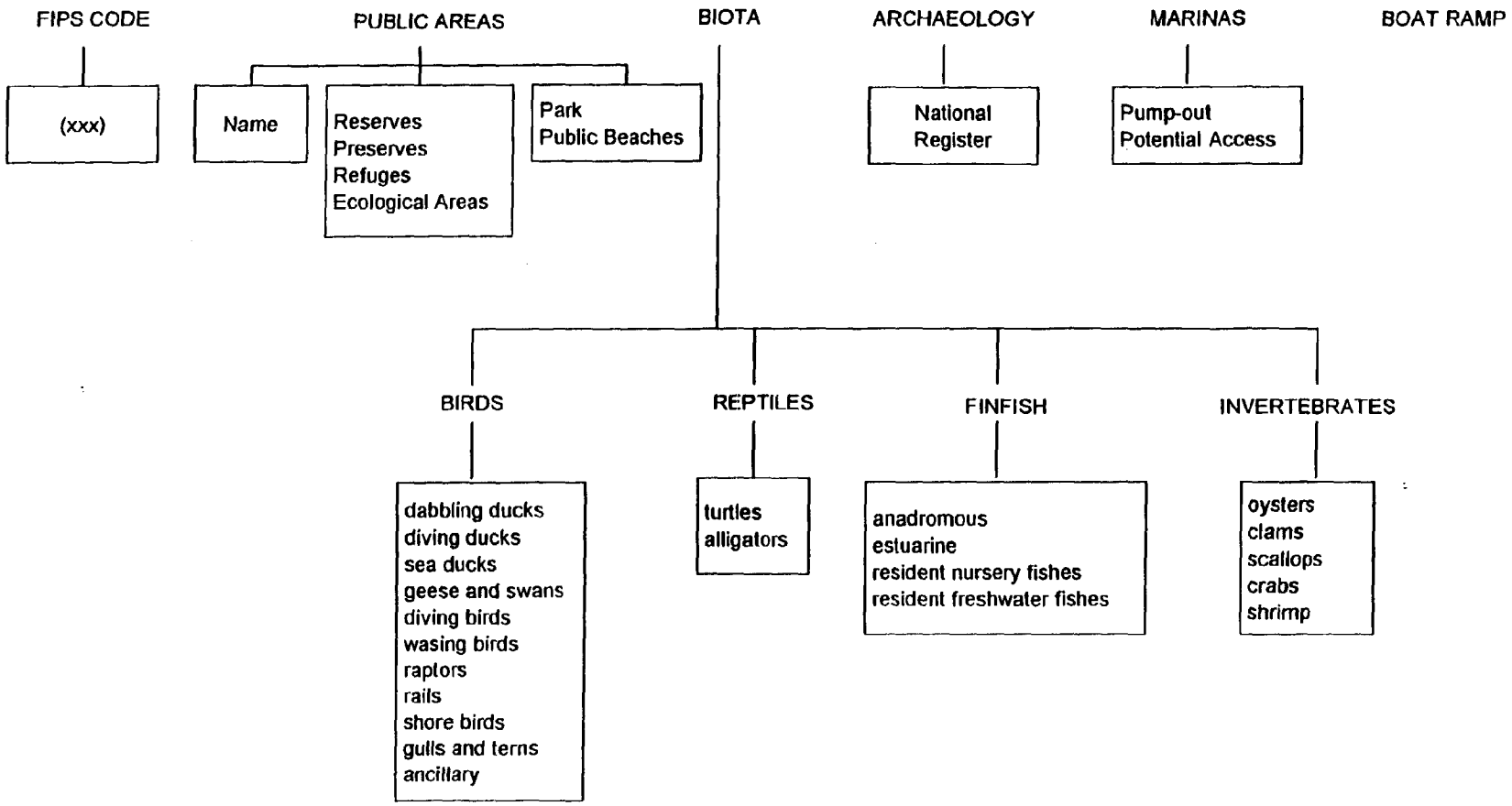


Figure 3

NO DISCHARGE ZONE DATABASE HIERARCHY

POINTS/LINES/POLYGON COVERAGES



Note: Biotic groups (e.g. dabbling ducks) may be broken down by species. Consult the database and Species List for additional information.

line (arc), or a polygon. This is necessary because of the nature and distribution of the various data elements originally portrayed on the ESI maps. Items like nesting areas for bird habitat may be represented as a single point, yet in several areas the nesting sites may be distributed as a range, represented by an arc. Shellfish beds are typically polygon coverages, while finfish are generally represented as a line coverage indicating the range along the waterbody.

Each map has the possibility for three different attribute files: a polygon, a line, and a point file. The naming convention for these files is directly related to the 4-digit VIMS map identification number (xxxx). The three different types of files will observe the following naming convention:

PTSXXXX.AAT - Arc Attributes
PTSXXXX.PAT - Point Attributes
POLXXXX.PAT - Polygon Attributes

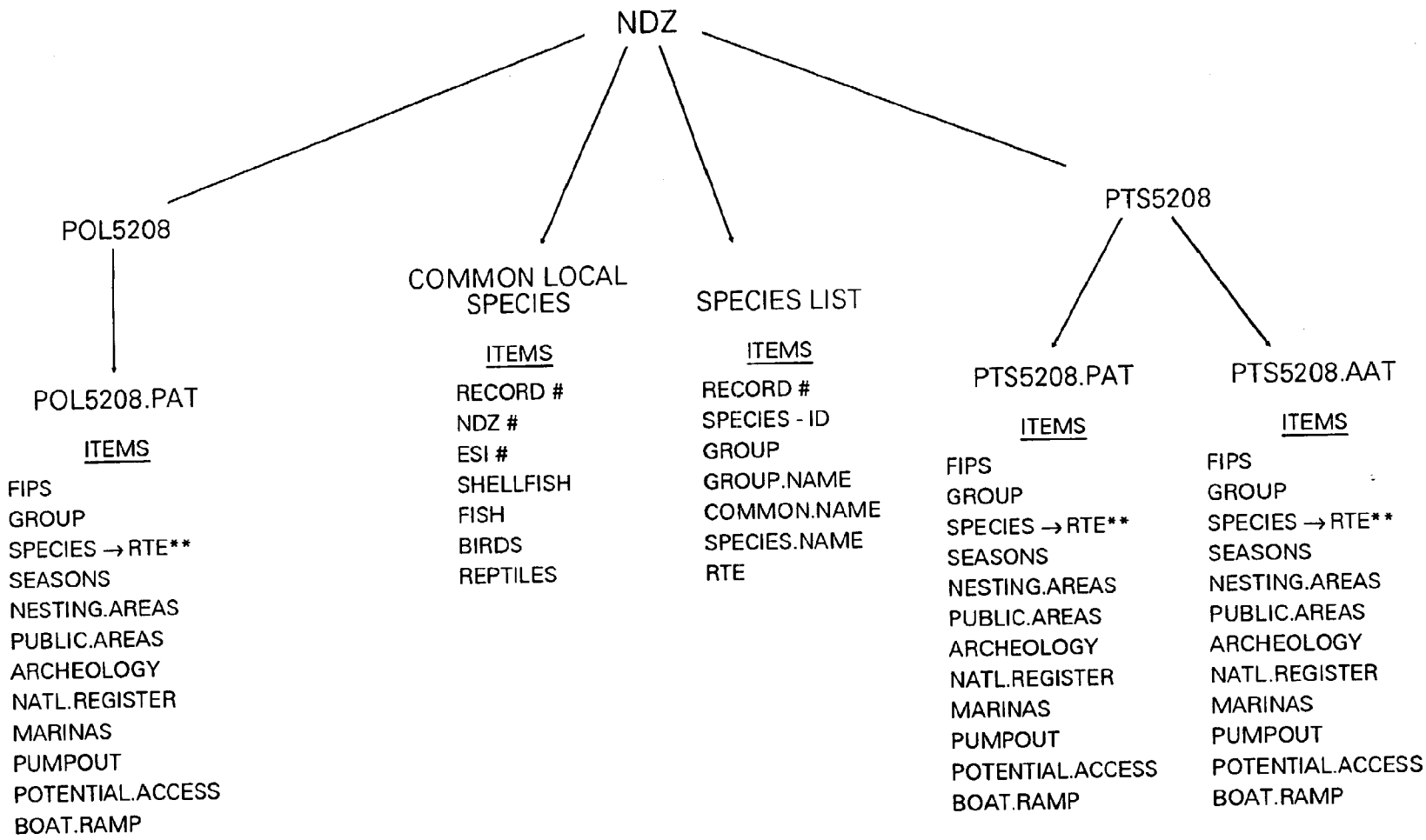
where XXXX is the map identification number, arcs are lines, and polygons are elements which can be represented as closed areas.

The above information for any map coverage can be queried through Arcedit or Arcplot by referencing POLXXXX or PTSXXXX (where XXXX is the VIMS map identification number). Access can also be achieved through Tables in Arc/Info. Figure 4 schematically illustrates the database structure. The various items listed within each file are defined for Arc/Info users in Appendix I.

A digital 1:24,000 shoreline coverage was used as the baseline coverage for generating the NDZ database. The digital shoreline record is a GIS coverage created as a separate activity of the CCI Program. Once the NDZ maps were digitized, the shoreline coverage was removed. It has not been included here as part of the NDZ data. It can, however, be acquired through the EcoMAPS Program at the Virginia Council on the Environment.

Species common to each individual map extent are referenced in a separate data file titled Common Local Species. Appendix III is a printout of the Common Local Species file. This file can be queried through Tables (in Arc/Info) and references both the ESI (ESI #) and the VIMS map (NDZ #) identification numbers. The user can scan this database to locate the map coverage of interest and the corresponding list of common local species broken down by the primary biotic categories shown in Figure 3 (e.g. Reptiles). The Common Local Species data file differs in content from the POLXXXX or PTSXXXX files to the extent that the information contained in the data file represents a regional perspective of species occurrence within the map limits, whereas data included in the POLXXXX or PTSXXXX files are very specific to the geographic areas indicated on the map. For example, a particular fish species may be common everywhere within the boundaries of the topographic coverage, and will therefore be listed in the Common Local Species file. However, that particular species may be prominent in one specific tributary during the spawning months, and therefore will be included in the POLXXXX or PTSXXXX data files with a reference to its seasonality or nursery area.

Figure 4. Arc / Info Database Structure



** RTE - Rare, Threatened or Endangered (in Virginia, Maryland and North Carolina).

A complete Species List modified from the ESI Atlas is available as an "Info" table which can be queried through Arc/Info. The Species List identifies the biological group, species, common name, seasonality, and rare threatened or endangered status. The GIS codes are listed for the items where appropriate. A hardcopy of the Species List data file is found in Appendix II. The list has application within all the various components of the NDZ database. Appendix I should be consulted to define the coded items.

DELIVERABLES

In addition to this report and the accompanying report entitled The Progression of "No Discharge Zone" Status in Water Bodies Across the Continental United States, a complete set of the Arc/Info digital NDZ database, generated as a component of this project, is being delivered to the Virginia Council on the Environment.

ANTICIPATED USES

As access to and use of GIS software continues to increase throughout the Commonwealth of Virginia, the database being generated for this project will have expanded utility far beyond the objectives of this project. Given this fact, coverages which may have been overlooked for the purpose of delineating potential NDZ regions, have been included as they have potential uses for other interests. Since the original ESI Atlas was produced in hardcopy with limited distribution, several state and federal agencies have expressed a great interest in acquiring the digital database once complete. State, federal, and local agencies will benefit from the availability of a comprehensive inventory of living aquatic resources within the Chesapeake Bay. In addition, this effort represents the first digital database of existing marina facilities in Virginia. The capabilities of GIS will allow this database to be updated and expanded in areas where research and management interests prevail.

APPENDIX I

NDZ ITEMS, CODES, AND DESCRIPTIONS

Appendix I

ITEM	CODE(S)/LABEL	DESCRIPTION
FIPS	xxx	3-digit integer character
PUBLIC AREAS	xxx...n	128 character alphanumeric place name
	reserves	designated reserve area
	preserves	designated preservation area
	refuges	designated wildlife refuge
	ecological area	designated area with ecological significance
	park/public beaches	public recreation area
GROUP	A - Q	Biotic Groups
Species	1 - 136	Species Name
rte status		Rare,threatened,endangered status (added to species code)
"	+	rte in Virginia
"	#	rte in Maryland
"	*	rte in North Carolina
"	^	species which are resident/nursery finfish
"	!	critical habitat area for species
"	~	seed beds
"	-	no rte
Seasons	1	summer
	2	fall
	3	winter
	4	spring
Nesting Areas	x	integer character referenced by species #

ITEM	CODE(S)/LABEL	DESCRIPTION
		GROUP BREAKDOWNS
GROUP	A	dabbling ducks
Species	1 - 9	consult Species List
GROUP	B	diving ducks
Species	10 - 20	consult Species List
GROUP	C	sea ducks
Species	21 - 25	consult Species List
GROUP	D	geese and swans
Species	26 - 31	consult species list
GROUP	E	diving birds
Species	32 - 37	consult Species List
GROUP	F	wading birds
Species	38 - 48	consult Species List
GROUP	G	raptors
Species	49 - 51	consult Species List
GROUP	H	rails
Species	52 - 55	consult Species List
GROUP	I	shore birds
Species	56 - 74	consult Species List
GROUP	J	gulls and terns
Species	75 - 88	consult Species List
GROUP	K	ancillary (waterfowl data)
Species	89 -94	consult Species List
GROUP	L	anadromous (fish)
Species	95 - 99	consult Species List

ITEM	CODE(S)/LABEL	DESCRIPTION
GROUP	M	nursery (fish)
Species	100 - 115	consult Species List
GROUP	N	resident freshwater (fish)
Species	116 - 120	consult Species List
GROUP	O	resident estuarine (fish)
Species	121 - 126	consult Species List
GROUP	P	invertebrates
Species	127 - 132	consult Species List
GROUP	Q	turtles and alligators (reptiles)
Species	133 - 136	consult Species List
ARCHAEOLOGY	1	1 archaeological site
	2-10	2 to 10 archaeological sites
	>10	greater than 10 archaeological sites
National Register	0	site not on the National Register
	1	site listed on the National Register
MARINAS	xxx...n	128 character alphanumeric place name
	x marina	8 character where x = number of marinas identified
Pump-out	0	no pump-put facility
	1	has a pump-out facility
Potential Access	0	is considered for water access
	1	is not considered for water access
BOAT RAMP	0	no boat ramp
	x	integer character for number of boat ramps present

APPENDIX II

NDZ SPECIES LIST

```
                1
SPECIES-ID       =    1
GROUP            =A
GROUP.NAME       =DABBLING.DUCKS
COMMON.NAME      =MALLARD
SPECIES.NAME     =Anas.platyrhynchos
RTE              =-
                2
SPECIES-ID       =    2
GROUP            =A
GROUP.NAME       =DABBLING.DUCKS
COMMON.NAME      =BLACK.DUCK
SPECIES.NAME     =Anas.rubripes
RTE              =-
                3
SPECIES-ID       =    3
GROUP            =A
GROUP.NAME       =DABBLING.DUCKS
COMMON.NAME      =PINTAIL
SPECIES.NAME     =Anas.acuta
RTE              =-
                4
SPECIES-ID       =    4
GROUP            =A
GROUP.NAME       =DABBLING.DUCKS
COMMON.NAME      =GADWALL
SPECIES.NAME     =Anas.strepera
RTE              =-
                5
SPECIES-ID       =    5
GROUP            =A
GROUP.NAME       =DABBLING.DUCKS
COMMON.NAME      =BLUE-WINGED.TEAL
SPECIES.NAME     =Anas.discors
RTE              =-
                6
SPECIES-ID       =    6
GROUP            =A
GROUP.NAME       =DABBLING.DUCKS
COMMON.NAME      =GREEN-WINGED.TEAL
SPECIES.NAME     =Anas.carolinensis
RTE              =-
                7
SPECIES-ID       =    7
GROUP            =A
GROUP.NAME       =DABBLING.DUCKS
COMMON.NAME      =AMERICAN.WIDGEON
SPECIES.NAME     =Anas.americana
RTE              =-
                8
SPECIES-ID       =    8
GROUP            =A
GROUP.NAME       =DABBLING.DUCKS
COMMON.NAME      =WOOD.DUCK
SPECIES.NAME     =Aix.sponsa
RTE              =-
                9
SPECIES-ID       =    9
GROUP            =A
GROUP.NAME       =DABBLING.DUCKS
COMMON.NAME      =SHOVELER
SPECIES.NAME     =Spatula.clypeata
RTE              =-
               10
SPECIES-ID       =   10
GROUP            =B
```

```
GROUP.NAME       =DIVING.DUCKS
COMMON.NAME      =LESSER.SCAUP
SPECIES.NAME     =Aythya.affinis
RTE              =-
                11
SPECIES-ID       =   11
GROUP            =B
GROUP.NAME       =DIVING.DUCKS
COMMON.NAME      =GREATER.SCAUP
SPECIES.NAME     =Aythya.marila
RTE              =-
                12
SPECIES-ID       =   12
GROUP            =B
GROUP.NAME       =DIVING.DUCKS
COMMON.NAME      =CANVASBACK
SPECIES.NAME     =Aythya.valisineria
RTE              =-
                13
SPECIES-ID       =   13
GROUP            =B
GROUP.NAME       =DIVING.DUCKS
COMMON.NAME      =RING.NECKED.DUCK
SPECIES.NAME     =Aythya.collaris
RTE              =-
                14
SPECIES-ID       =   14
GROUP            =B
GROUP.NAME       =DIVING.DUCKS
COMMON.NAME      =REDHEAD
SPECIES.NAME     =Aythya.americana
RTE              =-
                15
SPECIES-ID       =   15
GROUP            =B
GROUP.NAME       =DIVING.DUCKS
COMMON.NAME      =AMERICAN.GOLDENEYE
SPECIES.NAME     =Bucephala.clangula
RTE              =-
                16
SPECIES-ID       =   16
GROUP            =B
GROUP.NAME       =DIVING.DUCKS
COMMON.NAME      =BUFFLEHEAD
SPECIES.NAME     =Bucephala.albeola
RTE              =-
                17
SPECIES-ID       =   17
GROUP            =B
GROUP.NAME       =DIVING.DUCKS
COMMON.NAME      =COMMON.MERGANSER
SPECIES.NAME     =Mergus.merganser
RTE              =-
                18
SPECIES-ID       =   18
GROUP            =B
GROUP.NAME       =DIVING.DUCKS
COMMON.NAME      =RED-BREASTED.MERGANSER
SPECIES.NAME     =Mergus.serrator
RTE              =-
                19
SPECIES-ID       =   19
GROUP            =B
GROUP.NAME       =DIVING.DUCKS
COMMON.NAME      =HOODED.MERGANSER
SPECIES.NAME     =Lophodytes.cucullatus
```

```
RTE                =-
                  20
SPECIES-ID         =    20
GROUP              =B
GROUP.NAME         =DIVING.DUCKS
COMMON.NAME        =RUDDY.DUCK
SPECIES.NAME       =Oxyura.jamaicensis
RTE                =-
                  21
SPECIES-ID         =    21
GROUP              =C
GROUP.NAME         =SEA.DUCKS
COMMON.NAME        =SURF.SCOTER
SPECIES.NAME       =Melanitta.perspicillata
RTE                =-
                  22
SPECIES-ID         =    22
GROUP              =C
GROUP.NAME         =SEA.DUCKS
COMMON.NAME        =WHITE-WINGED.SCOTER
SPECIES.NAME       =Melanitta.deglandi
RTE                =-
                  23
SPECIES-ID         =    23
GROUP              =C
GROUP.NAME         =SEA.DUCKS
COMMON.NAME        =COMMON.SCOTER
SPECIES.NAME       =Oidemia.nigra
RTE                =-
                  24
SPECIES-ID         =    24
GROUP              =C
GROUP.NAME         =SEA.DUCKS
COMMON.NAME        =COMMON.EIDER
SPECIES.NAME       =Somateria.mollissima
RTE                =-
                  25
SPECIES-ID         =    25
GROUP              =C
GROUP.NAME         =SEA.DUCKS
COMMON.NAME        =OLDSQUAW
SPECIES.NAME       =Clangula.hyemalis
RTE                =-
                  26
SPECIES-ID         =    26
GROUP              =D
GROUP.NAME         =GEESE.AND.SWANS
COMMON.NAME        =CANADA.GOOSE
SPECIES.NAME       =Branta.canadensis
RTE                =-
                  27
SPECIES-ID         =    27
GROUP              =D
GROUP.NAME         =GEESE.AND.SWANS
COMMON.NAME        =ATLANTIC.BRANT
SPECIES.NAME       =Branta.bernicla
RTE                =-
                  28
SPECIES-ID         =    28
GROUP              =D
GROUP.NAME         =GEESE.AND.SWANS
COMMON.NAME        =GREATER.SNOW.GOOSE
SPECIES.NAME       =Anser.caerulescens.atlantica
RTE                =-
                  29
SPECIES-ID         =    29
```

```
GROUP              =D
GROUP.NAME         =GEESE.AND.SWANS
COMMON.NAME        =LESSER.SNOW.GOOSE
SPECIES.NAME       =Anser.caerulescens.caerulescens
RTE                =-
                  30
SPECIES-ID         =   30
GROUP              =D
GROUP.NAME         =GEESE.AND.SWANS
COMMON.NAME        =WHISTLING.SWAN
SPECIES.NAME       =Olor.columbianus
RTE                =-
                  31
SPECIES-ID         =   31
GROUP              =D
GROUP.NAME         =GEESE.AND.SWANS
COMMON.NAME        =MUTE.SWAN
SPECIES.NAME       =Cygnus.olor
RTE                =-
                  32
SPECIES-ID         =   32
GROUP              =E
GROUP.NAME         =DIVING.BIRDS
COMMON.NAME        =DOUBLE-CRESTED.CORMORANT
SPECIES.NAME       =Phalacrocorax.auritus
RTE                =*
                  33
SPECIES-ID         =   33
GROUP              =E
GROUP.NAME         =DIVING.BIRDS
COMMON.NAME        =COMMON.LOON
SPECIES.NAME       =Gavia.immer
RTE                =-
                  34
SPECIES-ID         =   34
GROUP              =E
GROUP.NAME         =DIVING.BIRDS
COMMON.NAME        =RED-THROATED.LOON
SPECIES.NAME       =Gavia.stellata
RTE                =-
                  35
SPECIES-ID         =   35
GROUP              =E
GROUP.NAME         =DIVING.BIRDS
COMMON.NAME        =HORNED.GREBE
SPECIES.NAME       =Podiceps.auritus
RTE                =-
                  36
SPECIES-ID         =   36
GROUP              =E
GROUP.NAME         =DIVING.BIRDS
COMMON.NAME        =BROWN.PELICAN
SPECIES.NAME       =Pelecanus.occidentalis
RTE                =*
                  37
SPECIES-ID         =   37
GROUP              =E
GROUP.NAME         =DIVING.BIRDS
COMMON.NAME        =PIED-BILLED.GREBE
SPECIES.NAME       =Podilymbus.podiceps
RTE                =-
                  38
SPECIES-ID         =   38
GROUP              =F
GROUP.NAME         =WADING.BIRDS
COMMON.NAME        =BLACK-CROWNED.NIGHT.HERON
```

```
SPECIES.NAME    =Nycticorax.nycticorax
RTE             =-
               39
SPECIES-ID      =   39
GROUP           =F
GROUP.NAME      =WADING.BIRDS
COMMON.NAME     =YELLOW-CROWNED.NIGHT.HERON
SPECIES.NAME    =Nycticorax.violaceus
RTE             =-
               40
SPECIES-ID      =   40
GROUP           =F
GROUP.NAME      =WADING.BIRDS
COMMON.NAME     =GREEN.HERON
SPECIES.NAME    =Butorides.striatus
RTE             =-
               41
SPECIES-ID      =   41
GROUP           =F
GROUP.NAME      =WADING.BIRDS
COMMON.NAME     =LOUISIANA.HERON
SPECIES.NAME    =Hydranassa.tricolor
RTE             =-
               42
SPECIES-ID      =   42
GROUP           =F
GROUP.NAME      =WADING.BIRDS
COMMON.NAME     =LITTLE.BLUE.HERON
SPECIES.NAME    =Florida.caerulea
RTE             =-
               43
SPECIES-ID      =   43
GROUP           =F
GROUP.NAME      =WADING.BIRDS
COMMON.NAME     =CATTLE.EGRET
SPECIES.NAME    =Bubulcus.ibis
RTE             =-
               44
SPECIES-ID      =   44
GROUP           =F
GROUP.NAME      =WADING.BIRDS
COMMON.NAME     =GREAT.EGRET
SPECIES.NAME    =Casmerodius.albus
RTE             =-
               45
SPECIES-ID      =   45
GROUP           =F
GROUP.NAME      =WADING.BIRDS
COMMON.NAME     =SNOWY.EGRET
SPECIES.NAME    =Egretta.thula
RTE             =-
               46
SPECIES-ID      =   46
GROUP           =F
GROUP.NAME      =WADING.BIRDS
COMMON.NAME     =GREAT.BLUE.HERON
SPECIES.NAME    =Ardea.herodias
RTE             =-
               47
SPECIES-ID      =   47
GROUP           =F
GROUP.NAME      =WADING.BIRDS
COMMON.NAME     =EASTERN.GLOSSY.IBIS
SPECIES.NAME    =Plegadis.falcinellus
RTE             =-
               48
```

```
SPECIES-ID      =   48
GROUP           =F
GROUP.NAME      =WADING.BIRDS
COMMON.NAME     =WHITE.IBIS
SPECIES.NAME    =Eudocimus.albus
RTE             =-
               49
SPECIES-ID      =   49
GROUP           =G
GROUP.NAME      =RAPTORS
COMMON.NAME     =BALD.EAGLE
SPECIES.NAME    =Haliaeetus.leucocephalus
RTE             =+#*
               50
SPECIES-ID      =   50
GROUP           =G
GROUP.NAME      =RAPTORS
COMMON.NAME     =OSPREY
SPECIES.NAME    =Pandion.haliaetus
RTE             =-
               51
SPECIES-ID      =   51
GROUP           =G
GROUP.NAME      =RAPTORS
COMMON.NAME     =PEREGRINE.FALCON
SPECIES.NAME    =Falco.peregrinus
RTE             =+#*
               52
SPECIES-ID      =   52
GROUP           =H
GROUP.NAME      =RAILS
COMMON.NAME     =CLAPPER.RAIL
SPECIES.NAME    =Rallus.longirostris.longirostris
RTE             =-
               53
SPECIES-ID      =   53
GROUP           =H
GROUP.NAME      =RAILS
COMMON.NAME     =KING.RAIL
SPECIES.NAME    =Rallus.longirostris.elegans
RTE             =-
               54
SPECIES-ID      =   54
GROUP           =H
GROUP.NAME      =RAILS
COMMON.NAME     =VIRGINIA.RAIL
SPECIES.NAME    =Rallus.aquaticus.limicola
RTE             =-
               55
SPECIES-ID      =   55
GROUP           =H
GROUP.NAME      =RAILS
COMMON.NAME     =SORA.RAIL
SPECIES.NAME    =Porzana.carolina
RTE             =-
               56
SPECIES-ID      =   56
GROUP           =I
GROUP.NAME      =SHORE.BIRDS
COMMON.NAME     =SEMIPALMATED.PLOVER
SPECIES.NAME    =Charadrius.hiaticula.semipalmatus
RTE             =-
               57
SPECIES-ID      =   57
GROUP           =I
GROUP.NAME      =SHORE.BIRDS
```

```
COMMON.NAME      =PIPING.PLOVER
SPECIES.NAME     =Charadrius.melodus
RTE              =+#
                58
SPECIES-ID       =   58
GROUP            =I
GROUP.NAME       =SHORE.BIRDS
COMMON.NAME      =KILLDEER
SPECIES.NAME     =Charadrius.vociferus
RTE              =-
                59
SPECIES-ID       =   59
GROUP            =I
GROUP.NAME       =SHORE.BIRDS
COMMON.NAME      =BLACK-BELLIED.PLOVER
SPECIES.NAME     =Pluvialis.squatarola
RTE              =-
                60
SPECIES-ID       =   60
GROUP            =I
GROUP.NAME       =SHORE.BIRDS
COMMON.NAME      =SPOTTED.SANDPIPER
SPECIES.NAME     =Actitus.macularia
RTE              =-
                61
SPECIES-ID       =   61
GROUP            =I
GROUP.NAME       =SHORE.BIRDS
COMMON.NAME      =DUNLIN
SPECIES.NAME     =Erolia.alpina
RTE              =-
                62
SPECIES-ID       =   62
GROUP            =I
GROUP.NAME       =SHORE.BIRDS
COMMON.NAME      =LEAST.SANDPIPER
SPECIES.NAME     =Erolia.minutilla
RTE              =-
                63
SPECIES-ID       =   63
GROUP            =I
GROUP.NAME       =SHORE.BIRDS
COMMON.NAME      =PURPLE.SANDPIPER
SPECIES.NAME     =Erolia.maritima
RTE              =-
                64
SPECIES-ID       =   64
GROUP            =I
GROUP.NAME       =SHORE.BIRDS
COMMON.NAME      =SEMIPALMATED.SANDPIPER
SPECIES.NAME     =Ereunetes.pusilla
RTE              =-
                65
SPECIES-ID       =   65
GROUP            =I
GROUP.NAME       =SHORE.BIRDS
COMMON.NAME      =WESTERN.SANDPIPER
SPECIES.NAME     =Ereunetes.mauri
RTE              =-
                66
SPECIES-ID       =   66
GROUP            =I
GROUP.NAME       =SHORE.BIRDS
COMMON.NAME      =SANDERLING
SPECIES.NAME     =Crocethia.alba
RTE              =-
```

```
                67
SPECIES-ID       =    67
GROUP            =I
GROUP.NAME       =SHORE.BIRDS
COMMON.NAME      =SHORT-BILLED.DOWITCHER
SPECIES.NAME     =Limnodramus.griseus
RTE              =-
                68
SPECIES-ID       =    68
GROUP            =I
GROUP.NAME       =SHORE.BIRDS
COMMON.NAME      =WILLET
SPECIES.NAME     =Catoptrophorus.semipalmatus
RTE              =-
                69
SPECIES-ID       =    69
GROUP            =I
GROUP.NAME       =SHORE.BIRDS
COMMON.NAME      =RED.KNOT
SPECIES.NAME     =Calidris.canutus
RTE              =-
                70
SPECIES-ID       =    70
GROUP            =I
GROUP.NAME       =SHORE.BIRDS
COMMON.NAME      =WILSON'S.PLOVER
SPECIES.NAME     =Charadrius.wilsonia
RTE              =+#
                71
SPECIES-ID       =    71
GROUP            =I
GROUP.NAME       =SHORE.BIRDS
COMMON.NAME      =GREATER.AND.LESSER.YELLOWLEGS
SPECIES.NAME     =Totanus.melanoleucus.and.Totanus.flavipes
RTE              =-
                72
SPECIES-ID       =    72
GROUP            =I
GROUP.NAME       =SHORE.BIRDS
COMMON.NAME      =AMERICAN.OYSTERCATCHER
SPECIES.NAME     =Haematopus.palliatus
RTE              =-
                73
SPECIES-ID       =    73
GROUP            =I
GROUP.NAME       =SHORE.BIRDS
COMMON.NAME      =MARBLED.GODWIT
SPECIES.NAME     =Limosa.fedoa
RTE              =-
                74
SPECIES-ID       =    74
GROUP            =I
GROUP.NAME       =SHORE.BIRDS
COMMON.NAME      =RUDDY.TURNSTONE
SPECIES.NAME     =Arenaria.interpres
RTE              =-
                75
SPECIES-ID       =    75
GROUP            =J
GROUP.NAME       =GULLS.AND.TERNS
COMMON.NAME      =LAUGHING.GULL
SPECIES.NAME     =Larus.atricilla
RTE              =-
                76
SPECIES-ID       =    76
GROUP            =J
```

```
GROUP.NAME       =GULLS.AND.TERNS
COMMON.NAME      =BONAPARTE'S.GULL
SPECIES.NAME     =Larus.philadelphia
RTE              =-
                77
SPECIES-ID       =   77
GROUP            =J
GROUP.NAME       =GULLS.AND.TERNS
COMMON.NAME      =RING-BILLED.GULL
SPECIES.NAME     =Larus.delawarensis
RTE              =-
                78
SPECIES-ID       =   78
GROUP            =J
GROUP.NAME       =GULLS.AND.TERNS
COMMON.NAME      =HERRING.GULL
SPECIES.NAME     =Larus.argentatus
RTE              =-
                79
SPECIES-ID       =   79
GROUP            =J
GROUP.NAME       =GULLS.AND.TERNS
COMMON.NAME      =GREAT.BLACK-BACKED.GULL
SPECIES.NAME     =Larus.marinus
RTE              =-
                80
SPECIES-ID       =   80
GROUP            =J
GROUP.NAME       =GULLS.AND.TERNS
COMMON.NAME      =BLACK.SKIMMER
SPECIES.NAME     =Rynchops.nigra
RTE              =+#*
                81
SPECIES-ID       =   81
GROUP            =J
GROUP.NAME       =GULLS.AND.TERNS
COMMON.NAME      =GULL-BILLED.TERN
SPECIES.NAME     =Gelochelidon.nilotica
RTE              =+#*
                82
SPECIES-ID       =   82
GROUP            =J
GROUP.NAME       =GULLS.AND.TERNS
COMMON.NAME      =ROYAL.TERN
SPECIES.NAME     =Sterna.maxima
RTE              =*
                83
SPECIES-ID       =   83
GROUP            =J
GROUP.NAME       =GULLS.AND.TERNS
COMMON.NAME      =COMMON.TERN
SPECIES.NAME     =Sterna.hirundo
RTE              =-
                84
SPECIES-ID       =   84
GROUP            =J
GROUP.NAME       =GULLS.AND.TERNS
COMMON.NAME      =FORSTER'S.TERN
SPECIES.NAME     =Sterna.forsteri
RTE              =-
                85
SPECIES-ID       =   85
GROUP            =J
GROUP.NAME       =GULLS.AND.TERNS
COMMON.NAME      =LEAST.TERN
SPECIES.NAME     =Sterna.albifrons
```

```
RTE                =+#*
                  86
SPECIES-ID         =    86
GROUP              =J
GROUP.NAME         =GULLS.AND.TERNS
COMMON.NAME        =CASPIAN.TERN
SPECIES.NAME       =Sterna.caspia
RTE                =-
                  87
SPECIES-ID         =    87
GROUP              =J
GROUP.NAME         =GULLS.AND.TERNS
COMMON.NAME        =SANDWICH.TERN
SPECIES.NAME       =Sterna.sandvicensis
RTE                =-
                  88
SPECIES-ID         =    88
GROUP              =J
GROUP.NAME         =GULLS.AND.TERNS
COMMON.NAME        =BLACK-LEGGED.KITTIWAKE
SPECIES.NAME       =Rissa.tridactyla
RTE                =-
                  89
SPECIES-ID         =    89
GROUP              =K
GROUP.NAME         =ANCILLARY
COMMON.NAME        =NORTHERN.PHALAROPE
SPECIES.NAME       =Lobipes.lobatus
RTE                =-
                  90
SPECIES-ID         =    90
GROUP              =K
GROUP.NAME         =ANCILLARY
COMMON.NAME        =WILSON'S.PHALAROPE
SPECIES.NAME       =Steganopus.tricolor
RTE                =-
                  91
SPECIES-ID         =    91
GROUP              =K
GROUP.NAME         =ANCILLARY
COMMON.NAME        =AMERICAN.COOT
SPECIES.NAME       =Fulica.americana
RTE                =-
                  92
SPECIES-ID         =    92
GROUP              =K
GROUP.NAME         =ANCILLARY
COMMON.NAME        =BOAT-TAILED.GRACKLE
SPECIES.NAME       =Cassidix.mexicanus
RTE                =-
                  93
SPECIES-ID         =    93
GROUP              =K
GROUP.NAME         =ANCILLARY
COMMON.NAME        =IPSWICH.SPARROW
SPECIES.NAME       =Passerculus.princeps
RTE                =-
                  94
SPECIES-ID         =    94
GROUP              =K
GROUP.NAME         =ANCILLARY
COMMON.NAME        =ANHINGA
SPECIES.NAME       =Anhinga.anhinga
RTE                =*
                  95
SPECIES-ID         =    95
```

```
GROUP              =L
GROUP.NAME         =ANADROMOUS
COMMON.NAME        =AMERICAN.SHAD
SPECIES.NAME       =Alosa.sapidissima
RTE                =-
                  96
SPECIES-ID         =   96
GROUP              =L
GROUP.NAME         =ANADROMOUS
COMMON.NAME        =ALEWIFE
SPECIES.NAME       =Alosa.pseudoharengus
RTE                =-
                  97
SPECIES-ID         =   97
GROUP              =L
GROUP.NAME         =ANADROMOUS
COMMON.NAME        =BLUEBACK.HERRING
SPECIES.NAME       =Alosa.aestivalis
RTE                =-
                  98
SPECIES-ID         =   98
GROUP              =L
GROUP.NAME         =ANADROMOUS
COMMON.NAME        =ATLANTIC.STURGEON
SPECIES.NAME       =Acipenser.oxyrhynchus
RTE                =-
                  99
SPECIES-ID         =   99
GROUP              =L
GROUP.NAME         =ANADROMOUS
COMMON.NAME        =SHORTNOSE.STURGEON
SPECIES.NAME       =Acipenser.brevirostrum
RTE                =+#
                 100
SPECIES-ID         =  100
GROUP              =M
GROUP.NAME         =NURSERY
COMMON.NAME        =MULLET
SPECIES.NAME       =Mugil.cephalus
RTE                =-
                 101
SPECIES-ID         =  101
GROUP              =M
GROUP.NAME         =NURSERY
COMMON.NAME        =ATLANTIC.MENHADEN
SPECIES.NAME       =Brevoortia.tyrannus
RTE                =-
                 102
SPECIES-ID         =  102
GROUP              =M
GROUP.NAME         =NURSERY
COMMON.NAME        =BLUEFISH
SPECIES.NAME       =Pomatomus.saltatrix
RTE                =-
                 103
SPECIES-ID         =  103
GROUP              =M
GROUP.NAME         =NURSERY
COMMON.NAME        =SPOT
SPECIES.NAME       =Leiostomus.xanthurus
RTE                =-
                 104
SPECIES-ID         =  104
GROUP              =M
GROUP.NAME         =NURSERY
COMMON.NAME        =WEAKFISH
```

```
SPECIES.NAME    =Cynoscion.regalis
RTE             =-
              105
SPECIES-ID      =  105
GROUP           =M
GROUP.NAME      =NURSERY
COMMON.NAME     =SPOTTED.SEA.TROUT
SPECIES.NAME    =Cynoscion.nebulosus
RTE             =-
              106
SPECIES-ID      =  106
GROUP           =M
GROUP.NAME      =NURSERY
COMMON.NAME     =BLACK.SEA.BASS
SPECIES.NAME    =Centropristis.striata
RTE             =-
              107
SPECIES-ID      =  107
GROUP           =M
GROUP.NAME      =NURSERY
COMMON.NAME     =RED.DRUM
SPECIES.NAME    =Sciaenops.ocellata
RTE             =-
              108
SPECIES-ID      =  108
GROUP           =M
GROUP.NAME      =NURSERY
COMMON.NAME     =BLACK.DRUM
SPECIES.NAME    =Pogonias.cromis
RTE             =-
              109
SPECIES-ID      =  109
GROUP           =M
GROUP.NAME      =NURSERY
COMMON.NAME     =SILVER.PERCH
SPECIES.NAME    =Bairdiella.chrysura
RTE             =-
              110
SPECIES-ID      =  110
GROUP           =M
GROUP.NAME      =NURSERY
COMMON.NAME     =EEL
SPECIES.NAME    =Anguilla.rostrata
RTE             =-
              111
SPECIES-ID      =  111
GROUP           =M
GROUP.NAME      =NURSERY
COMMON.NAME     =ATLANTIC.CROAKER
SPECIES.NAME    =Micropogonias.undulatus
RTE             =^
              112
SPECIES-ID      =  112
GROUP           =M
GROUP.NAME      =NURSERY
COMMON.NAME     =STRIPED.BASS
SPECIES.NAME    =Morone.saxatilis
RTE             =^
              113
SPECIES-ID      =  113
GROUP           =M
GROUP.NAME      =NURSERY
COMMON.NAME     =SOUTHERN.FLOUNDER
SPECIES.NAME    =Paralichthys.lethostigma
RTE             =^
              114
```

```
SPECIES-ID      =  114
GROUP           =M
GROUP.NAME      =NURSERY
COMMON.NAME     =WINTER.FLOUNDER
SPECIES.NAME    =Pseudopleuronectes.americanus
RTE             =^
              115
SPECIES-ID      =  115
GROUP           =M
GROUP.NAME      =NURSERY
COMMON.NAME     =SUMMER.FLOUNDER
SPECIES.NAME    =Paralichthys.dentatus
RTE             =^
              116
SPECIES-ID      =  116
GROUP           =N
GROUP.NAME      =RESIDENT.FRESHWATER
COMMON.NAME     =WHITE.AND.CHANNEL.CATFISH
SPECIES.NAME    =Ictalurus.catus.and.Ictalurus.punctatus
RTE             =-
              117
SPECIES-ID      =  117
GROUP           =N
GROUP.NAME      =RESIDENT.FRESHWATER
COMMON.NAME     =WHITE.PERCH
SPECIES.NAME    =Morone.americana
RTE             =-
              118
SPECIES-ID      =  118
GROUP           =N
GROUP.NAME      =RESIDENT.FRESHWATER
COMMON.NAME     =YELLOW.PERCH
SPECIES.NAME    =Perca.flavescens
RTE             =-
              119
SPECIES-ID      =  119
GROUP           =N
GROUP.NAME      =RESIDENT.FRESHWATER
COMMON.NAME     =BANDED.KILLIFISH
SPECIES.NAME    =Fundulus.diaphanus
RTE             =-
              120
SPECIES-ID      =  120
GROUP           =N
GROUP.NAME      =RESIDENT.FRESHWATER
COMMON.NAME     =TIDEWATER.SILVERSIDE
SPECIES.NAME    =Menidia.beryllina
RTE             =-
              121
SPECIES-ID      =  121
GROUP           =O
GROUP.NAME      =RESIDENT.ESTUARINE
COMMON.NAME     =ATLANTIC.SILVERSIDE
SPECIES.NAME    =Menidia.menidia
RTE             =-
              122
SPECIES-ID      =  122
GROUP           =O
GROUP.NAME      =RESIDENT.ESTUARINE
COMMON.NAME     =MUMMICHOG
SPECIES.NAME    =Fundulus.heteroclitus
RTE             =-
              123
SPECIES-ID      =  123
GROUP           =O
GROUP.NAME      =RESIDENT.ESTUARINE
```

```
COMMON.NAME      =STRIPED.KILLIFISH
SPECIES.NAME     =Fundulus.majalis
RTE              =-
              124
SPECIES-ID       =  124
GROUP            =O
GROUP.NAME       =RESIDENT.ESTUARINE
COMMON.NAME      =ANCHOVY
SPECIES.NAME     =Anchoa.mitchelli
RTE              =-
              125
SPECIES-ID       =  125
GROUP            =O
GROUP.NAME       =RESIDENT.ESTUARINE
COMMON.NAME      =SHEEPSHEAD.MINNOW
SPECIES.NAME     =Cyprinodon.variegatus
RTE              =-
              126
SPECIES-ID       =  126
GROUP            =O
GROUP.NAME       =RESIDENT.ESTUARINE
COMMON.NAME      =MARYLAND.DARTER
SPECIES.NAME     =Etheostoma.sellare
RTE              =+
              127
SPECIES-ID       =  127
GROUP            =P
GROUP.NAME       =INVERTEBRATES
COMMON.NAME      =OYSTER
SPECIES.NAME     =Crassostrea.virginica
RTE              =-
              128
SPECIES-ID       =  128
GROUP            =P
GROUP.NAME       =INVERTEBRATES
COMMON.NAME      =HARD.CLAM
SPECIES.NAME     =Mercenaria.mercenaria
RTE              =-
              129
SPECIES-ID       =  129
GROUP            =P
GROUP.NAME       =INVERTEBRATES
COMMON.NAME      =SOFT.CLAM
SPECIES.NAME     =Mya.arenaria
RTE              =-
              130
SPECIES-ID       =  130
GROUP            =P
GROUP.NAME       =INVERTEBRATES
COMMON.NAME      =BAY.SCALLOP
SPECIES.NAME     =Argopecten.irradians
RTE              =-
              131
SPECIES-ID       =  131
GROUP            =P
GROUP.NAME       =INVERTEBRATES
COMMON.NAME      =BLUE.CRAB
SPECIES.NAME     =Callinectes.sapidus
RTE              =-
              132
SPECIES-ID       =  132
GROUP            =P
GROUP.NAME       =INVERTEBRATES
COMMON.NAME      =SOUTHERN.SHRIMP
SPECIES.NAME     =Penaeus.spp.
RTE              =-
```

```
                133
SPECIES-ID        =  133
GROUP             =Q
GROUP.NAME        =TURTLES.AND.ALLIGATOR
COMMON.NAME       =ATLANTIC.GREEN
SPECIES.NAME      =Chelonia.mydas
RTE               =+#*
                134
SPECIES-ID        =  134
GROUP             =Q
GROUP.NAME        =TURTLES.AND.ALLIGATOR
COMMON.NAME       =ATLANTIC.LOGGERHEAD
SPECIES.NAME      =Caretta.caretta
RTE               =+#*
                135
SPECIES-ID        =  135
GROUP             =Q
GROUP.NAME        =TURTLES.AND.ALLIGATOR
COMMON.NAME       =ATLANTIC.RIDLEY
SPECIES.NAME      =Lepidochelys.kempi
RTE               =+#*
                136
SPECIES-ID        =  136
GROUP             =Q
GROUP.NAME        =TURTLES.AND.ALLIGATOR
COMMON.NAME       =AMERICAN.ALLIGATOR
SPECIES.NAME      =Alligator.mississippiensis
RTE               =*
```

APPENDIX III

COMMON LOCAL SPECIES FILE

NDZ# = 5108
ESI# = 57
SHELLFISH =
FISH =
BIRDS =
REPTILES =

NDZ# = 5109
ESI# = 56
SHELLFISH =
FISH =
BIRDS =
REPTILES =

NDZ# = 5115
ESI# = 25
SHELLFISH =
FISH = 1 2 3 4:N, 1 4:99+#
BIRDS =
REPTILES =

NDZ# = 5207
ESI# = 59
SHELLFISH =
FISH = 1 2 3 4:N, 4:99+#, 3 4:117 118
BIRDS = 3:1 2, 1 2 4:32, 1 2 3 4:8
REPTILES =

NDZ# = 5208
ESI# = 58
SHELLFISH =
FISH = 1 4:L, 1 2 3 4:N, 4:99*# 112^ 116, 3 4:117 118
BIRDS = 3:A B 12 26, 3 4:1 2
REPTILES =

NDZ# = 5214
ESI# = 26
SHELLFISH =
FISH = 1 2 3 4:N, 1 4:L(+#)
BIRDS = 1 2 3 4:8
REPTILES =

NDZ# = 5215
ESI# = 9
SHELLFISH =
FISH =
BIRDS =
REPTILES =

NDZ# = 5216
ESI# = 6
SHELLFISH =
FISH =
BIRDS =

```
REPTILES =

NDZ# = 5217
ESI# = 4
SHELLFISH =
FISH =
BIRDS =
REPTILES =

NDZ# = 5307
ESI# = 60
SHELLFISH =
FISH = 1 2 3 4:N 4 99+# 112^, 1 4:117 118
BIRDS = 1 3 4:1 2 4 5, 3:3 12 26 28 30, 1 2 4:32
REPTILES =

NDZ# = 5314
ESI# = 27
SHELLFISH =
FISH = 1 4:L 112^, 1 2 3 4:N, 4:99+#
BIRDS = 2 3:A 26 30, 1 2 3 4:8, 2 4:H
REPTILES =

NDZ# = 5315
ESI# = 10
SHELLFISH =
FISH =
BIRDS =
REPTILES =

NDZ# = 5317
ESI# = 5
SHELLFISH =
FISH =
BIRDS =
REPTILES =

NDZ# = 5318
ESI# = 2
SHELLFISH =
FISH =
BIRDS =
REPTILES =

NDZ# = 5407
ESI# = 61
SHELLFISH =
FISH = 1 2 3 4:N, 4:112^ 117
BIRDS = 3 4:1 2, 3:1 2 28, 1 2 4: 32
REPTILES =

NDZ# = 5413
ESI# = 29
SHELLFISH =
```

```
FISH = 1 4:L 99+# 112^, 1 2 3 4:N
BIRDS = 2 3:A 26 30, 1 2 3 4:8 49+#*, 3 4:18, 1 2 4:50
REPTILES =

NDZ# = 5414
ESI# = 28
SHELLFISH =
FISH = 1 4:L 99+# 112^
BIRDS = 2 3:A 1 2 5 26 30, 1 2 3 4:8 49+#*, 3 4:18
REPTILES =

NDZ# = 5415
ESI# = 11
SHELLFISH = 1 2 4:131
FISH = 1 4:L 112^, 1 2 4:M 101 103 O, 1 2:102 112^
BIRDS = 3:B 26, 1 2 3 4:J
REPTILES =

NDZ# = 5416
ESI# = 8
SHELLFISH = 1:131
FISH = 1 4:L 112^ 117, 1 2 4:M 101 103 112^ 118 120 121 124
BIRDS = 3:B 26, 1 2 3 4:I J, 1 2 4:32 50
REPTILES =

NDZ# = 5418
ESI# = 3
SHELLFISH =
FISH =
BIRDS =
REPTILES =

NDZ# = 5419
ESI# = 1
SHELLFISH =
FISH =
BIRDS =
REPTILES =

NDZ# = 5506
ESI# = 64
SHELLFISH = 1 2 3 4:131
FISH = 1 2 4:M 101, 4:99+# 112^ 117
BIRDS = 3:A 3 B 10 12 13 26 30, 3 4:1 2 68, 1 2 4:32
REPTILES =

NDZ# = 5507
ESI# = 62
SHELLFISH =
FISH = 1 4:L 95 96 97, 1 2 4:M, 1 2 3 4:N, 4:99+# 112^
BIRDS = 3:A B 12 26 30 49+#*, 3 4:1 2 3 5 6 12 68, 1 2 3 4:8
REPTILES =

NDZ# = 5509
```

ESI# = 43
SHELLFISH =
FISH = 1 4:L 118, 1:M 103 111^, 1 2 3 4:N 117 O, 4:95 96 97 99+#
112^ 116, 1 2 4:101
BIRDS = 1 4:A 1 2 5, 2:B 10 12 13 C D 26 30, 3:25, 1 2 4:H 53 55
REPTILES =

NDZ# = 5512
ESI# = 31
SHELLFISH =
FISH = 1 4:L 99+#, 1 2 4:101 112^ 117
BIRDS = 2 3:B 10 11 12 20 26, 1 2 3 4:8, 3:49+#*, 1 2 4:50
REPTILES =

NDZ# = 5513
ESI# = 30
SHELLFISH =
FISH = 1 4:L 99+# 112^, 1 2 3 4:N 116 118
BIRDS = 2 3:A 26 30, 1 2 3 4:8, 3 4:18, 3:49+#*, 1 2 4:50
REPTILES =

NDZ# = 5514
ESI# = 13
SHELLFISH = 1 2 4:131
FISH = 1 4:L 112^, 1 2 4:M 101 103 O, 1 2:102 112^
BIRDS = 3:B 26, 1 2 3 4:I J, 1 2 4:32 50
REPTILES =

NDZ# = 5515
ESI# = 12
SHELLFISH = 1 2 4:131
FISH = 1 4:L 112^ 117, 1 2 4:M 101 103 O, 1:102 112^
BIRDS = 1 2 3 4:J, 2 3:B 26
REPTILES =

NDZ# = 5606
ESI# = 65
SHELLFISH = 1 4:131
FISH = 1 4:L 95 96 97, 1 2 4:M 101 112^ 117, 1 2 3 4:O
BIRDS = 3:A B 10 11 12 13 20 C 25 D 26 30, 3 4:1 2 4 5, 1 2 3 4:I
J, 1 2 4:32
REPTILES =

NDZ# = 5607
ESI# = 63
SHELLFISH = 1 4:131
FISH = 1 4:L 95 96 97, 1 2 4:M 101 112^ 117, 1 2 3 4:O
BIRDS = 3 4:A 1 2 5 B 68, 3:10 12 13 25 49+#*, 2 3:26, 1 2 4:32 78
79 83
REPTILES =

NDZ# = 5608
ESI# = 45
SHELLFISH = 1 2 4:131

FISH = 1 4:L, 1 2 4:M 112^ 117, 1 2 3 4:N O, 4:99+# 101 124, 1 2:118, 1:121
BIRDS = 3:A 3 B 10 12 13 26 30, 3 4:1 2, 1 2 3 4:J, 1 2 4:32
REPTILES =

NDZ# = 5609
ESI# = 44
SHELLFISH =
FISH = 1 4:L, 1 2 4:M 101 112^ 124, 1 2 3 4:N 117 O, 4:95 96 99+#, 1:103 111^
BIRDS = 3:A 1 2 3 4 5 B 10 13 25, 1 2 3 4:J, 2 3:26 30
REPTILES =

NDZ# = 5611
ESI# = 33
SHELLFISH =
FISH = 1 4:L 99+#, 1 2 4:M 102 104 112^, 1 2 3 4:117 O
BIRDS = 1 2 4:50
REPTILES =

NDZ# = 5612
ESI# = 32
SHELLFISH =
FISH = 1 4:L(+#), 1 2 4:M 102 104 112^, 1 2 3 4:117 O
BIRDS = 1 2 3 4:8, 1 2 4:50
REPTILES =

NDZ# = 5614
ESI# = 14
SHELLFISH = 1 2 4:131
FISH = 1 4:L, 1 2 4:M 101 103 112^ O, 1 2:102 115^
BIRDS = 3:B 26, 1 2 3 4:J, 1 2 4:50
REPTILES =

NDZ# = 5705
ESI# = 67
SHELLFISH = 1 2 3 4:131
FISH = 1 4:L, 1 2 4:M 101 102 111^ 112^ 115^ 119, 1 2 3 4:O
BIRDS = 1 2 3 4:1 2 5 I J, 2 3:A B 10 11 12 13 20 C 25 26 30
REPTILES =

NDZ# = 5706
ESI# = 66
SHELLFISH = 1 2 4:131
FISH = 1 4:L, 1 2 4:M 101 102 112^, 1 2 3 4:N O, 4:95 96, 1:103 111^
BIRDS = 3:A B 10 11 12 13 20 C 25 26 30, 1 2 3 4:1 2 5 I J, 1 2 4:8 32
REPTILES =

NDZ# = 5707
ESI# = 49
SHELLFISH = 1 2 4:131
FISH = 1 4:L, 1 2 4:M 101 102 112^ 114^ 115^ 119, 2 3 4:N O, 1:121

BIRDS = 3:A B 10 11 12 13 20 25 26 30, 1 3 4:1 2 5, 1 2 3 4:I J, 1 2 4:50
REPTILES =

NDZ# = 5708
ESI# = 46
SHELLFISH = 1 2 4:131, 1 2 3 4:127
FISH = 1 4:L, 1 2 4:M, 1 2 3 4:O
BIRDS = 2 3 4:1 2 5, 2 3:10 11 12 13 25 26, 2 4:32*, 1 2 3 4:I J
REPTILES =

NDZ# = 5711
ESI# = 34
SHELLFISH = 1 2 3 4:127 131, 1 4:L, 1 2 4:M 101 112^, 1 2 3 4:N O, 4:124
FISH = 1 4:L, 1 2 4:M 101 112^, 1 2 3 4:N O, 4:124
BIRDS = 3:A, 2 3:1 2 4, 1 2 3 4:I J, 1 2 4:46 50
REPTILES =

NDZ# = 5714
ESI# = 15
SHELLFISH = 1 2 4:131
FISH = 1 4:L, 1 2 4:M 101 103 O, 1 2:102 112^ 115^
BIRDS = 2 3:A B C D 26, 1 2 4:32* 50, 1 2 3 4:I J
REPTILES =

NDZ# = 5804
ESI# = 71
SHELLFISH =
FISH = 1 4:L 99+#, 1 2 4:M, 1 2 3 4:O
BIRDS = 1 2 3 4:2 5 I J, 2 3:A B 20 25 26 28, 1 2 4:32
REPTILES =

NDZ# = 5805
ESI# = 68
SHELLFISH = 1 2 4:131
FISH = 1 4:L, 1 2 4:M 101 102 112^ 115^, 1 2 3 4:O, 4:114^
BIRDS = 2 3:A B 10 11 12 13 15 20 C 25, 3:D 26 30, 1 2 3 4:1 2 5 I J, 1 2 4:32 53 54
REPTILES =

NDZ# = 5806
ESI# = 53
SHELLFISH = 1 2 3 4:131
FISH = 1 4:L, 1 2 4:101 102 112^ 115^, 1 2 3 4:O
BIRDS = 3:A 5 B 10 11 12 13 20 C 25, 3 4:1 2 4 5, 1 2 3 4:I J, 1 2 4:46
REPTILES =

NDZ# = 5807
ESI# = 50
SHELLFISH = 1 2 3 4:129 131
FISH = 1 2 4:L M 101 102 112^ 114^ 115^ 119, 1 2 3 4:O, 1:121
BIRDS = 3:10 11 12 13 20 25 26, 1 2 3 4:1 2 5 I J, 1 2 4:32* 50

```
REPTILES =

NDZ# = 5809
ESI# = 40
SHELLFISH = 1 2 4:131
FISH = 1 4:L, 1 2 4:M 101 102 104 112^, 1 2 3 4:115^ O, 2 3 4:114^,
4:119
BIRDS = 3:A B 26, 1 2 3 4:I J, 1 2 4:46 50
REPTILES =

NDZ# = 5810
ESI# = 36
SHELLFISH = 1 2 3 4:1
FISH = 1 4:L, 1 2 4:M 101 112^, 1 2 3 4:115^ O, 4:124
BIRDS = 3:A B 26, 1 2 3 4:H I J, 1 2 4:50
REPTILES =

NDZ# = 5811
ESI# = 35
SHELLFISH = 1 2 3 4:131
FISH = 1 4:L, 1 2 4:M 101 112^, 1 2 3 4:O, 4:124
BIRDS = 3:A B 26, 2 3:1 2 5, 1 2 3 4:I J, 1 2 4:46 50
REPTILES =

NDZ# = 5813
ESI# = 17
SHELLFISH = 1 2 4:131
FISH = 1 2 4:M N O
BIRDS = 3:B C D, 1 2 3 4:I J, 1 2 4:50
REPTILES =

NDZ# = 5814
ESI# = 16
SHELLFISH = 1 2 3 4:131
FISH =
BIRDS = 1 2 3 4:I J, 1 2 4:32* 50
REPTILES =

NDZ# = 5904
ESI# = 72
SHELLFISH = 1 2 3 4:131
FISH = 1 4:L 99+#, 1 2 4:M, 1 2 3 4:O
BIRDS = 2 3:A B 20 25 26 28, 1 2 3 4:1 2 5 I J, 1 2 4:32
REPTILES = 2 4:134+#*

NDZ# = 5905
ESI# = 69
SHELLFISH = 1 2 3 4:128 131
FISH = 1 4:L 99+#, 1 2 4:M, 1 2 3 4:O
BIRDS = 2 3:A B 20 25 26 29, 1 2 3 4:1 2 5 I J, 1 2 4:32
REPTILES =

NDZ# = 5906
ESI# = 54
```

```
SHELLFISH = 1 2 4:131
FISH = 1 4:L 99+#, 1 2 4:M, 1 2 3 4:O
BIRDS = 2 3:A B 20 25 26 28, 1 2 3 4:2 5 I J
REPTILES = 1 2 4:134+#*

NDZ# = 5907
ESI# = 51
SHELLFISH = 1 2 3 4:131
FISH = 1 4:L 99+#, 1 2 4:M, 1 2 3 4:O
BIRDS = 1 2 4:32* 50, 2 3:A B 20 25 26 28, 1 2 3 4:I J
REPTILES = 2 4:134+#*

NDZ# = 5908
ESI# = 47
SHELLFISH = 1 2 3 4:131
FISH = 1 4:L 99+#, 1 2 4:M, 1 2 3 4:O
BIRDS = 2 3:A B 20 25 26 29, 1 2 3 4:I J, 1 2 4:50
REPTILES =

NDZ# = 5909
ESI# = 41
SHELLFISH = 1 2 4:131
FISH = 1 2 4:L M 101 102 104 112^ 114^ 115^, 1 2 3 4:O
BIRDS = 3:A B 25 26, 1 2 3 4:I J
REPTILES =

NDZ# = 5910
ESI# = 37
SHELLFISH = 1 2 4:131
FISH = 1 4:L, 1 2 4:M 101 102 104 112^ 114^ 115^, 1 2 3 4:O
BIRDS = 3:A B 26 27 28 30, 1 2 3 4:I J, 1 4:46
REPTILES =

NDZ# = 5912
ESI# = 19
SHELLFISH = 1 2 3 4:129 131
FISH = 1 4:L, 1 2 4:M O
BIRDS = 3:B C 26 30, 1 2 3 4:I, 1 2 4:32* 50
REPTILES =

NDZ# = 5913
ESI# = 18
SHELLFISH = 1 2 4:131
FISH = 1 4:L 112^, 1 2 4:M 103 O, 1 2:101 102 115^
BIRDS = 3:A B C 26 30 I, 1 2 3 4:J, 1 2 4:50
REPTILES =

NDZ# = 6004
ESI# = 73
SHELLFISH = 1 2 3 4:131
FISH = 1 4:L 99+#, 1 2 4:M, 1 2 3 4:O
BIRDS = 2 3:A B C, 3:D 26 27 30, 1 2 3 4:I J, 1 2 4:32
REPTILES =
```

```
NDZ# = 6005
ESI# = 70
SHELLFISH = 1 2 3 4:131
FISH = 1 4:L 99+#, 1 2 4:M, 1 2 3 4:O
BIRDS = 2 3:A B 20 25 26 28, 1 2 3 4:2 5 I J
REPTILES = 1 2 4:134+#*

NDZ# = 6006
ESI# = 55
SHELLFISH = 1 2 4:131
FISH = 1 4:L 99+#, 1 2 4:M, 1 2 3 4:O
BIRDS = 2 3:A B 20 25 26 28, 1 2 3 4:2 5 I J
REPTILES = 1 2 4:134+#*

NDZ# = 6007
ESI# = 52
SHELLFISH = 1 2 4:131, 1 2 3 4:128
FISH = 1 4:L 99+#, 1 2 4:M, 1 2 3 4:N
BIRDS = 1 2 3 4:2 5 I J, 2 3:A B 20 25 26 28, 1 2:50N
REPTILES = 1 2 4:134+#*

NDZ# = 6008
ESI# = 48
SHELLFISH = 1 2 4:131
FISH = 1 2 3 4:M O
BIRDS = 2 3:A B 20 25 26 29, 1 2 3 4:2 5 I, 1 2 4:50
REPTILES = 1 2 4:134+#*

NDZ# = 6009
ESI# = 42
SHELLFISH = 1 2 4:131
FISH = 1 4:L, 1 2 4:M 101 102 104, 1 2 3 4:112^ 115^ O, 4:119
BIRDS = 3:A B C D 26 27 28 30, 1 2 3 4:I J, 1 2 4:46 50
REPTILES = 1:134+#*

NDZ# = 6010
ESI# = 39
SHELLFISH = 1 2 3 4:131
FISH = 1 2 4:L M 101 102 104, 1 2 3 4:112^ 115^ O
BIRDS = 3:A B C D 26 30, 1 2 3 4:I J, 1 2 4:46
REPTILES = 1:134+#*

NDZ# = 6011
ESI# = 38
SHELLFISH = 1 2 4:131
FISH = 1 4:L, 1 2 4:B 101 102 104, 1 2 3 4:112^ 115^ O
BIRDS = 3:A B C D 26 30, 1 2 3 4:I J, 1 2 4:50
REPTILES = 1 2:134+#*

NDZ# = 6012
ESI# = 20
SHELLFISH = 1 2 4:131
FISH = 1 4:L, 1 2 4:M O, 3 4:114^
BIRDS = 3:A B C 26 30, 1 2 4:32 50, 1 2 3 4:I J
```

REPTILES =

NDZ# = 6104
ESI# = 74
SHELLFISH = 1 2 3 4:131
FISH = 1 2 4:M, 1 2 3 4:O
BIRDS = 1 2 3 4:2 5 I J, 1 2 4:32, 2 3:A B 20 25 26 28
REPTILES = 1 2 4:134+#*

NDZ# = 6204
ESI# = 75
SHELLFISH = 1 2 3 4:131
FISH = 1 2 3 4:O, 1 2 4:M
BIRDS = 2 3:A B 20 25 26 28, 1 2 3 4:2 5 I J, 1 2 4:F
REPTILES = 1 4:134+#*

NDZ# = 6205
ESI# = 103
SHELLFISH = 1 2 3 4:131
FISH = 1 2 4:M, 1 2 3 4:O
BIRDS = 1 2 3 4:I J, 2 3:A B 20 25 26 27
REPTILES = 1 4:134+#*

NDZ# = 6206
ESI# = 100
SHELLFISH = 1 2 3 4:131
FISH = 1 4:L 99+#, 1 2 4:M
BIRDS = 2 3:A B C, 1 2 3 4:1 2 F I J, 3:28 30, 1 2 4:32 50
REPTILES = 1 4:134+#*

NDZ# = 6207
ESI# = 96
SHELLFISH = 1 2 3 4:131
FISH = 1 4:L 99+#, 1 2 4:M, 1 2 3 4:O
BIRDS = 2 3:A B C, 1 2 3 4:1 2 45 J, 3:28 30, 1 2 4:32 F 50
REPTILES = 1 4:134+#*

NDZ# = 6212
ESI# = 21
SHELLFISH = 1 2 4:131
FISH = 1 4:L, 1 2 4:M 112^, 1 2 3 4:O
BIRDS = 2 3:A B C, 3:D 26 27 30, 1 2 4:F 50, 1 2 3 4:I J
REPTILES = 1:134+#*

NDZ# = 6301
ESI# = 78
SHELLFISH = 1 2 3 4:131
FISH = 1 2 4:M
BIRDS = 3:A C 26 28 31 50, 1 2 3 4:I J, 2 3:G(+#*), 2:51+#*
REPTILES = 1 4:134+#*

NDZ# = 6302
ESI# = 77
SHELLFISH = 1 2 3 4:131

```
FISH = 1 2 4:M
BIRDS = 3:C 26 28, 1 2 4:F 50 H, 1 2 3 4:I J
REPTILES = 1 4:134+#*

NDZ# = 6303
ESI# = 76
SHELLFISH = 1 2 3 4:131
FISH = 1 2 4:M
BIRDS = 3:C 26, 1 2 3 4:I J
REPTILES = 1 4:134+#*

NDZ# = 6305
ESI# = 104
SHELLFISH = 1 2 4:131, 1 2 3 4:127 128
FISH = 1 2 4:M 100 101 102 103 106 111^ 114^ 115^, 1 2 3 4:O
BIRDS = 1 2 4:36* F 50 51+#*, 3:A B C D 26 27 28 30, 1 2 3 4:1 2 I
J, 2 3 4:52
REPTILES = 1 4:134+#*

NDZ# = 6306
ESI# = 101
SHELLFISH = 1 2 3 4:131
FISH = 1 2 4:M 100 101 102 103 106 111^ 114^ 115^
BIRDS = 2 3:A B C, 1 2 3 4:1 2 F 50 51+#* 52 I J, 3:28 30, 1:36*
REPTILES = 1 4:134+#*

NDZ# = 6307
ESI# = 97
SHELLFISH = 1 2 3 4:131
FISH = 1 2 4:M 100 101 102 103 106 111^ 114^ 115^, 1 2 3 4:O
BIRDS = 2 3:A B C, 1 2 3 4:1 2 F 52 I J, 3:28 30, 1 2 4:50
REPTILES = 1 4:134+#*

NDZ# = 6308
ESI# = 93
SHELLFISH = 1 2 4:131
FISH = 1 4:L, 1 2 4:M, 1 2 3 4:112^ 115^ O
BIRDS = 3:A B D 26 27 28 30 31, 3 4:C 21 22 23 25, 1 2 4:50 H, 1 2
3 4:I J
REPTILES = 1 2 4:134+#*

NDZ# = 6309
ESI# = 90
SHELLFISH = 1 2 4:131
FISH = 1 4:L, 1 2 4:M 102 104 106 114^, 1 2 3 4:112^ 115^ O
BIRDS = 3:A B D 26 27 28 30 31, 1 2 3 4:1 2 I J 85+#*, 3 4:C 21 22
23 25, 1 2 4:46 50 H
REPTILES = 1:134+#*

NDZ# = 6310
ESI# = 86
SHELLFISH = 1 2 4:131
FISH = 1 4:L, 1 2 4:M 112^ O
BIRDS = 3:A B D 26 27 30, 2 3:C, 1 2 3 4:1 2 I J, 1 2 4:46 50 54
```

```
REPTILES = 1:134+#*

NDZ# = 6311
ESI# = 81
SHELLFISH = 1 2 4:131
FISH = 1 4:L, 1 2 4:M, 1 2 3 4:112^ O
BIRDS = 1 2 3 4:1 2 I J, 2 3:A B C 26 27 30, 1 2 4:F 52
REPTILES = 1 2 4:134+#*

NDZ# = 6312
ESI# = 22
SHELLFISH = 1 2 4:131, 1 2 3 4:128
FISH = 1 4:L, 1 2 4:M, 1 2 3 4:112^ O
BIRDS = 2 3:A B C, 1 2 4:F 50, 1 3 4:1 2, 3:D 26 27 28 30, 1 2 3
4:52 I J 80+#*
REPTILES = 1:134+#*

NDZ# = 6406
ESI# = 102
SHELLFISH = 1 2 3 4:131
FISH = 1 2 4:M 100 101 102 103 106 114^ 115^, 1 2 3 4:O
BIRDS = 2 3:A B C D 26 27 28 30, 1 2 3 4:1 2 F 52 I J, 1:36*, 1 2
4:51+#*
REPTILES = 1 4:134+#*

NDZ# = 6407
ESI# = 98
SHELLFISH = 1 2 3 4:131
FISH = 1 2 4:M 100 101 102 103 106 111^ 114^ 115^, 1 2 3 4:O
BIRDS = 2 3:A B C D 26 27 28 30, 1 2 4:F 51+#* 75N 84N, 1 2 3 4:1
2 F 52 I J, 1:36*
REPTILES = 1 4:134+#*

NDZ# = 6408
ESI# = 94
SHELLFISH = 1 2 3 4:127 128 131
FISH = 1 2 4:M 100 101 102 103 106 111^ 114^ 115^, 1 2 3 4:O
BIRDS = 2 3:A B C D 26 27 28 30, 1 2 3 4:1 2 52 I J, 1 2 4:36* F
51+#*
REPTILES = 1:134+#*

NDZ# = 6409
ESI# = 91
SHELLFISH = 1 2 3 4:128 131
FISH = 1 2 3 4:O, 1 2 4:M 100 101 102 103 106 111^ 114^ 115^
BIRDS = 2 3:A B C, 1 2 3 4:1 2 D 26 27 28 30 52 I J, 1 2 4:F 51+#*,
1:36*
REPTILES = 1:134+#*

NDZ# = 6410
ESI# = 87
SHELLFISH = 1 2 4:131
FISH = 1 4:L, 1 2 4:M, 1 2 3 4:O
BIRDS = 3:A B D, 2 3:C, 1 2 3 4:1 2 I J, 1 2 4:46 H, 2:50
```

```
REPTILES = 1:134+#*

NDZ# = 6411
ESI# = 82
SHELLFISH = 1 2 4:131
FISH = 1 4:L, 1 2 4:M, 1 2 3 4:O
BIRDS = 3:A B C D 26 27 30, 1 2 3 4:1 2 I J, 1 2 4:46
REPTILES = 1:134+#*

NDZ# = 6412
ESI# = 23
SHELLFISH = 1 2 4:131
FISH = 1 4:L, 1 2 4:M, 1 2 3 4:O
BIRDS = 1 2 3 4:2 I J 80+#*, 2 3:A B C, 3:26 27 30, 1 2 4:H 50 83
84
REPTILES =

NDZ# = 6507
ESI# = 99
SHELLFISH =
FISH = 1 2 4:M 100 101 102 103 106 111^ 114^ 115^
BIRDS = 2 3:A B C D 26 27 28 30, 1 2 3 4:1 2 F 52 I J, 1:36*
REPTILES = 1 4:134+#*

NDZ# = 6508
ESI# = 95
SHELLFISH = 1 2 3 4:128 131
FISH = 1 2 4:M 100 101 102 103 106 111^ 114^ 115^, 1 2 3 4:O
BIRDS = 2 3:A B C, 1 2 4:F 51+#*, 1 2 3 4:1 2 D 26 27 28 30 52 I J,
1:36*
REPTILES = 1:134+#*

NDZ# = 6509
ESI# = 92
SHELLFISH = 1 2 3 4:128 131
FISH = 1 2 3 4:O, 1 2 4:M 100 101 102 103 106 111^ 114^ 115^
BIRDS = 2 3:A B C, 1 2 3 4:1 2 D 26 27 28 30 52 I J, 1 2 4:F 51+#*,
1:36*
REPTILES = 1:134+#*

NDZ# = 6510
ESI# = 88
SHELLFISH = 1 2 3 4:131
FISH = 1 2 4:M 100 101 102 103 106 111^ 114^ 115^, 1 2 3 4:O
BIRDS = 2 3:A B C, 1 2 4:F 51+#*, 1 2 3 4:1 2 D 26 27 28 30 52 I J,
1:36*
REPTILES = 1:134+#*

NDZ# = 6511
ESI# = 83
SHELLFISH = 1 2 4:131
FISH = 1 4:L, 1 2 4:M O, 1 2 3 4:112^
BIRDS = 2 3:A B, 3:C D, 1 2 3 4:1 2 H I J, 1 2 4:46 50
REPTILES = 1 4:134+#*
```

```
NDZ# = 6512
ESI# = 24
SHELLFISH = 1 2 4:131
FISH = 1 4:L, 1 2 4:M, 1 2 3 4:O
BIRDS = 2 3:A B C D, 1 2 4:F, 1 2 3 4:55 I, 1:50
REPTILES = 1 4:134+#*

NDZ# = 6610
ESI# = 89
SHELLFISH = 1 2 3 4:128 131
FISH = 1 2 4:M 100 101 102 103 106 111^ 114^ 115^, 1 2 3 4:O
BIRDS = 2 3:A B C, 1 2 3 4:1 2 D 26 27 28 30 52 I J, 1 2 4:F 51+#*,
1:36*
REPTILES = 1:134+#*

NDZ# = 6611
ESI# = 84
SHELLFISH = 1 2 3 4:128 131
FISH = 1 2 4:M 100 101 102 103 106 111^ 114^ 115^, 1 2 3 4:O
BIRDS = 2 3:A B C, 1 2 3 4:1 2 D 26 27 28 30 52 I J, 1 2 4:F 51+#*,
1:36*
REPTILES = 1:134+#*

NDZ# = 6711
ESI# = 85
SHELLFISH = 1 2 3 4:131
FISH = 1 2 4:M, 4:114^, 1 2 3 4:O
BIRDS = 2 3:A B C 26, 1 2 3 4:1 2 F 52 I J 85+#*, 3:D, 1:36*, 1
2:51+#*
REPTILES = 1:134+#*

NDZ# = 6712
ESI# = 79
SHELLFISH = 1 2 3 4:128 131
FISH = 1 2 4:M, 1 2 3 4:O
BIRDS = 2 3:A B C 26, 1 2 3 4:1 2 4 5 I 57+# 72 J, 3:D, 1:36*,
2:G(+#*), 1 2:51+#*
REPTILES = 1:134+#*

NDZ# = 6812
ESI# = 80
SHELLFISH = 1 2 3 4:128 131
FISH = 1 2 4:M, 1 2 3 4:O, 3 4:114^
BIRDS = 3:A B C D 27 28 30, 1 2 3 4:1 2 4 F 51+#* I J, 2 3 4:26 31,
1:36*, 1 2 4:57+# 70+#, 2:G(+#*)
REPTILES = 1 4:134+#*
```