

TABLE 4. Fish Abundance (no./transect) at Station WW, Waianae Ocean Outfall, O'ahu, Hawai'i, for 1994 Through 1998

	1994			1995			1996			1997			1998	
Taxon	Transect			Transect			Transect			Transect			Transect	
	Alpha	Beta		Alpha	Beta		Alpha	Beta		Alpha	Beta		Alpha	Beta
FAMILY ACANTHURIDAE														
<i>Acanthurus olivaceus</i>	3	16		0	8		1	13		0	5		0	5
<i>Acanthurus blochii</i>	0	121		0	3		0	0		0	0		0	0
<i>Acanthurus nigroris</i>	0	10		0	3		0	5		0	1		0	0
<i>Acanthurus triostegus</i>	0	0		0	3		0	1		0	0		0	3
<i>Ctenochaetus strigosus</i>	0	33		0	35		0	18		0	13		0	16
<i>Zanclus cornutus</i>	0	0		0	3		0	2		0	1		1	0
<i>Zebrasoma flavescens</i>	0	0		0	5		0	1		0	2		0	12
FAMILY BALISTIDAE														
<i>Sufflamen bursa</i>	5	0		5	0		1	2		4	2		4	0
<i>Melichthys vidua</i>	2	0		0	0		0	0		0	4		0	1
<i>Rhinecanthus rectangulus</i>	1	0		0	1		0	0		2	0		0	0
FAMILY CHAETODONTIDAE														
<i>Chaetodon miliaris</i>	0	5		0	8		0	30		0	18		0	6
<i>Chaetodon multicinctus</i>	0	0		0	6		0	1		0	4		0	6
<i>Chaetodon fremblii</i>	0	0		0	2		0	1		0	2		0	1
<i>Forcipiger longirostris</i>	0	2		0	2		0	1		0	0		0	0
FAMILY CIRRHITIDAE														
<i>Paracirrhites forsteri</i>	0	2		0	1		0	0		0	0		1	0
FAMILY LABRIDAE														
<i>Thalassoma duperrey</i>	3	35		6	8		1	5		5	3		5	5
<i>Bodianus bilunulatus</i>	2	1		0	2		0	0		0	0		0	1
<i>Coris gaimard</i>	0	0		0	1		0	0		0	0		0	0
<i>Anampses chrysocephalus</i>	0	0		0	2		0	0		0	2		0	2
FAMILY LETHRINIDAE														
<i>Monotaxis grandoculis</i>	0	2		0	0		0	0		0	0		0	0
FAMILY LUTJANIDAE														
<i>Lutjanus kasmira</i>	0	200		0	60		0	15		0	12		0	25
FAMILY MONACANTHIDAE														
<i>Pervagor spilosoma</i>	0	0		1	0		0	0		0	0		0	0
FAMILY MULLIDAE														
<i>Parupeneus multifasciatus</i>	2	6		10	6		0	3		0	2		0	0
<i>Parupeneus porphyreus</i>	0	2		0	8		0	10		0	3		2	6
<i>Mulloidichthys flavolineatus</i>	0	5		0	1		0	50		0	31		0	30
<i>Mulloidichthys vanicolensis</i>	0	0		0	6		0	5		0	12		0	8
FAMILY HOLOCENTRIDAE														
<i>Myripristis berndti</i>	0	12		0	9		0	20		0	12		0	30
<i>Sargocentron</i> sp.	0	0		0	12		0	4		0	2		0	1

TABLE 4—Continued

	1994			1995			1996			1997			1998	
Taxon	Transect			Transect			Transect			Transect			Transect	
	Alpha	Beta		Alpha	Beta		Alpha	Beta		Alpha	Beta		Alpha	Beta
FAMILY POMACENTRIDAE														
<i>Dascyllus albisella</i>	0	45		5	19		0	46		0	10		0	18
<i>Chromis agilis</i>	0	10		2	2		0	0		0	1		3	11
<i>Chromis hanui</i>	0	12		0	6		0	3		0	2		0	8
<i>Chromis verator</i>	0	2		0	2		0	6		0	3		0	4
<i>Chromis vanderbilti</i>	0	0		0	5		0	11		0	0		0	0
<i>Abudefduf sordidus</i>	0	2		0	1		0	5		0	3		0	2
<i>Abudefduf abdominalis</i>	0	0		0	65		0	45		0	28		0	37
FAMILY TETRAODONTIDAE														
<i>Arothron hispidus</i>	2	0		1	0		1	0		1	1		0	1
FAMILY SERRANIDAE														
<i>Epinephelus quernus</i>	0	0		0	1		0	0		0	0		0	0
FAMILY FISTULARIIDAE														
<i>Fistularia commersonii</i>	0	0		0	1		0	0		0	1		0	1
Total No. of Individuals	20	523		30	297		4	303		12	180		16	240
Total No. of Species	8	20		7	33		4	25		4	27		6	25