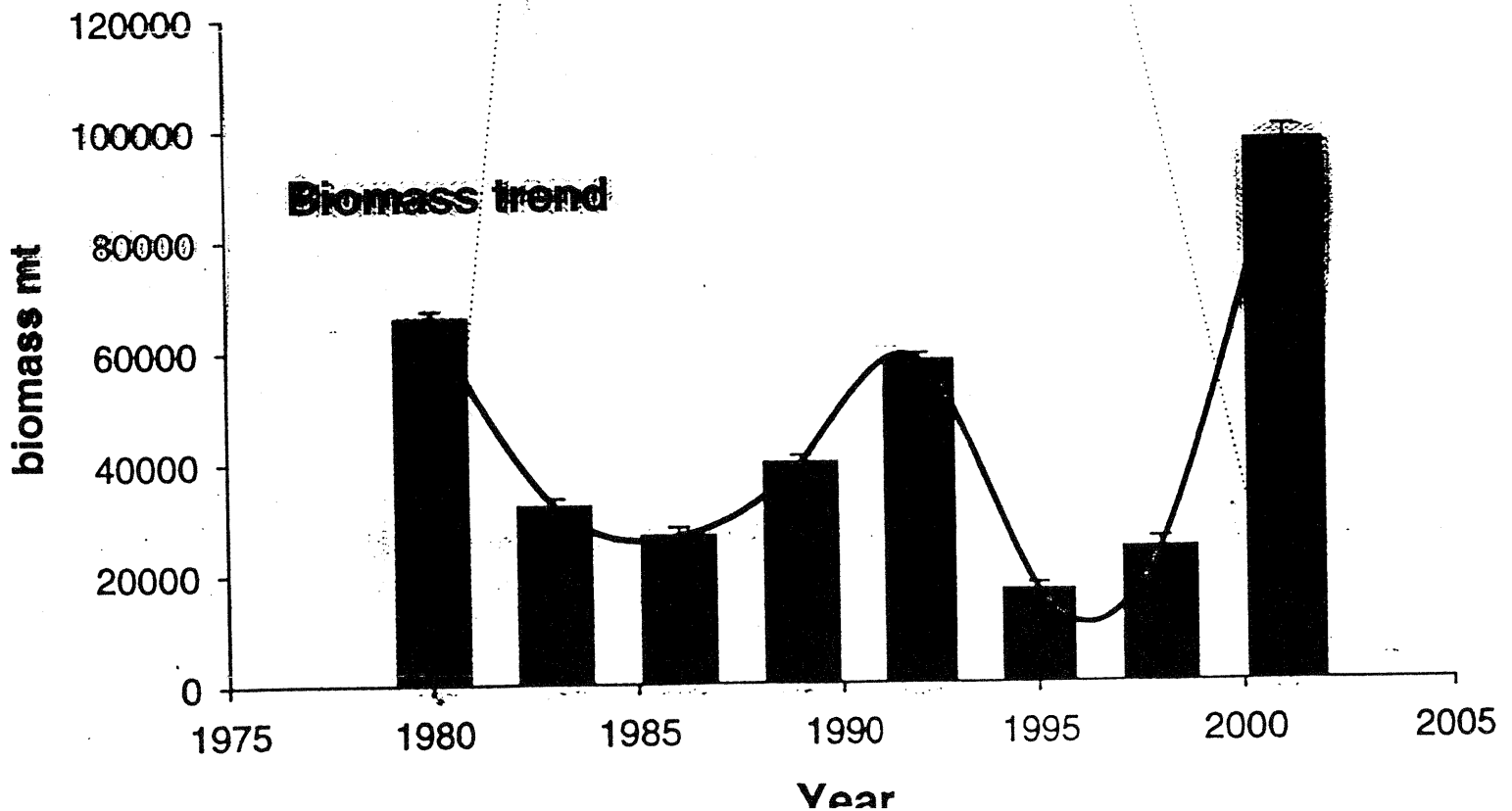
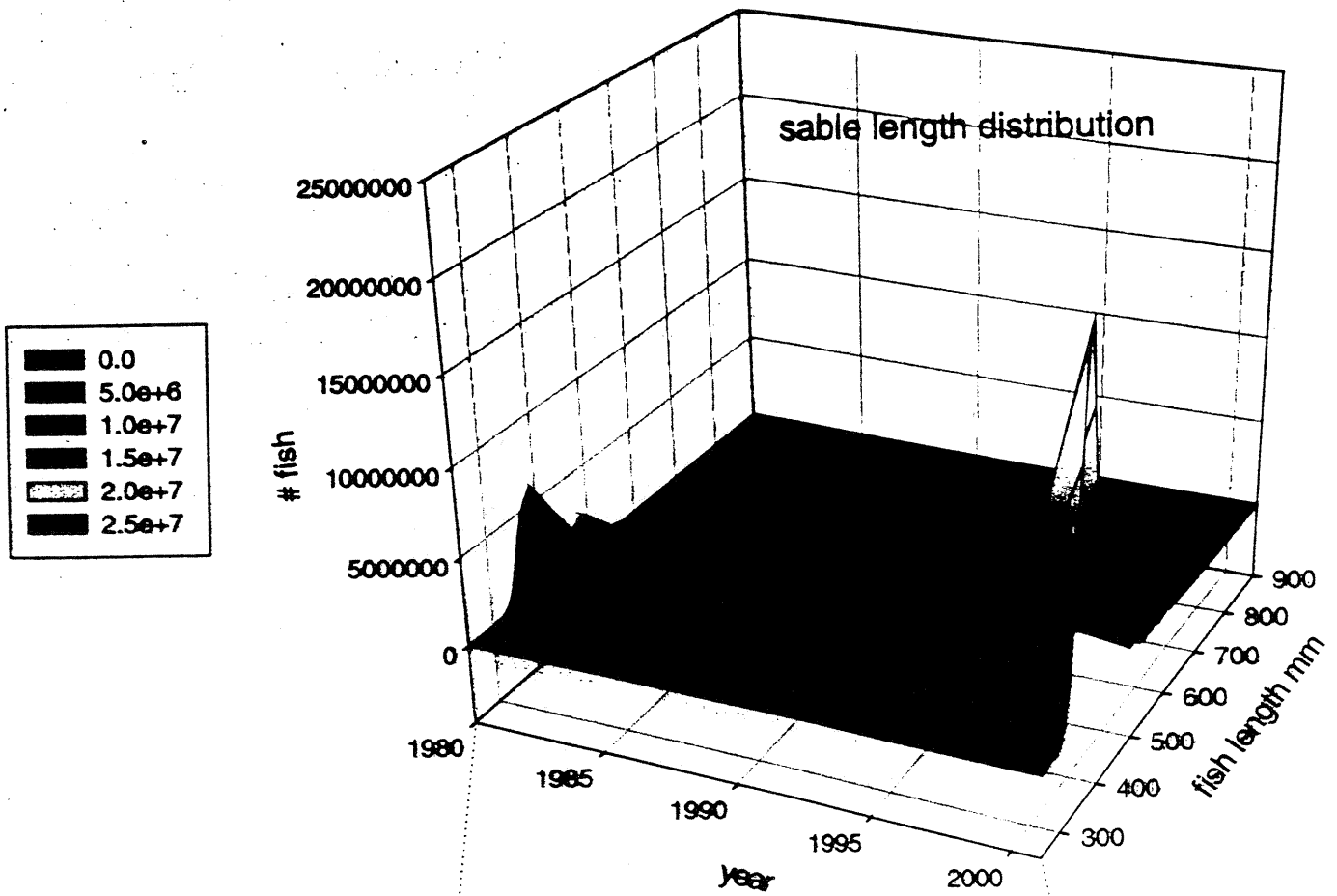
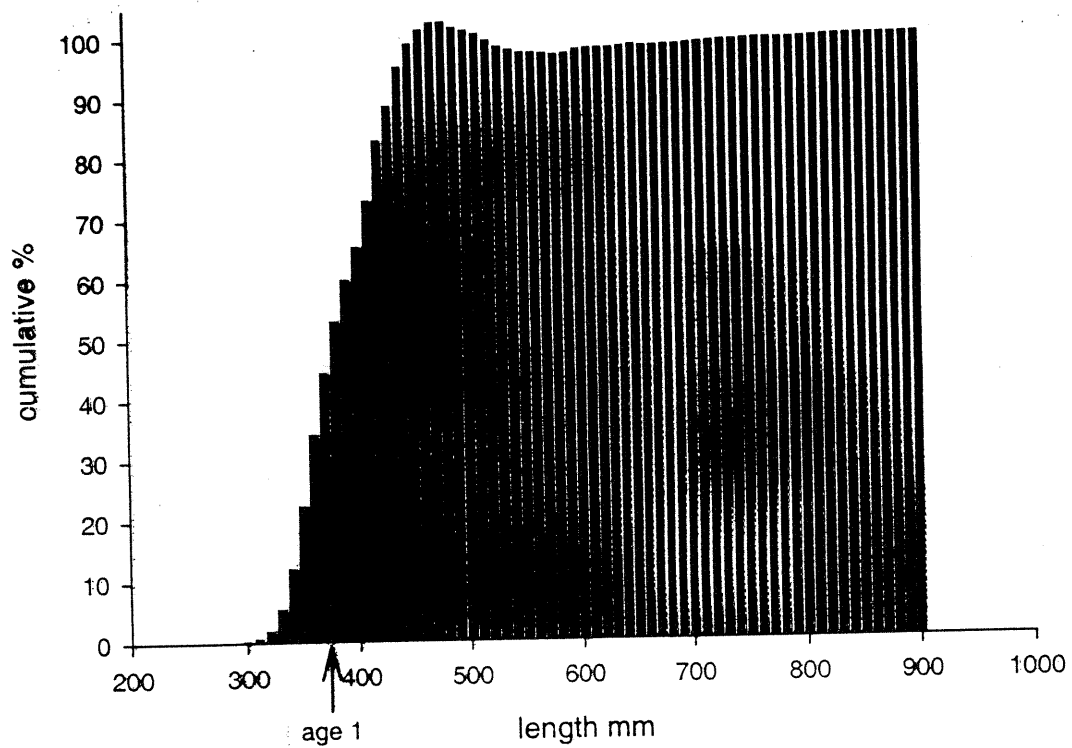


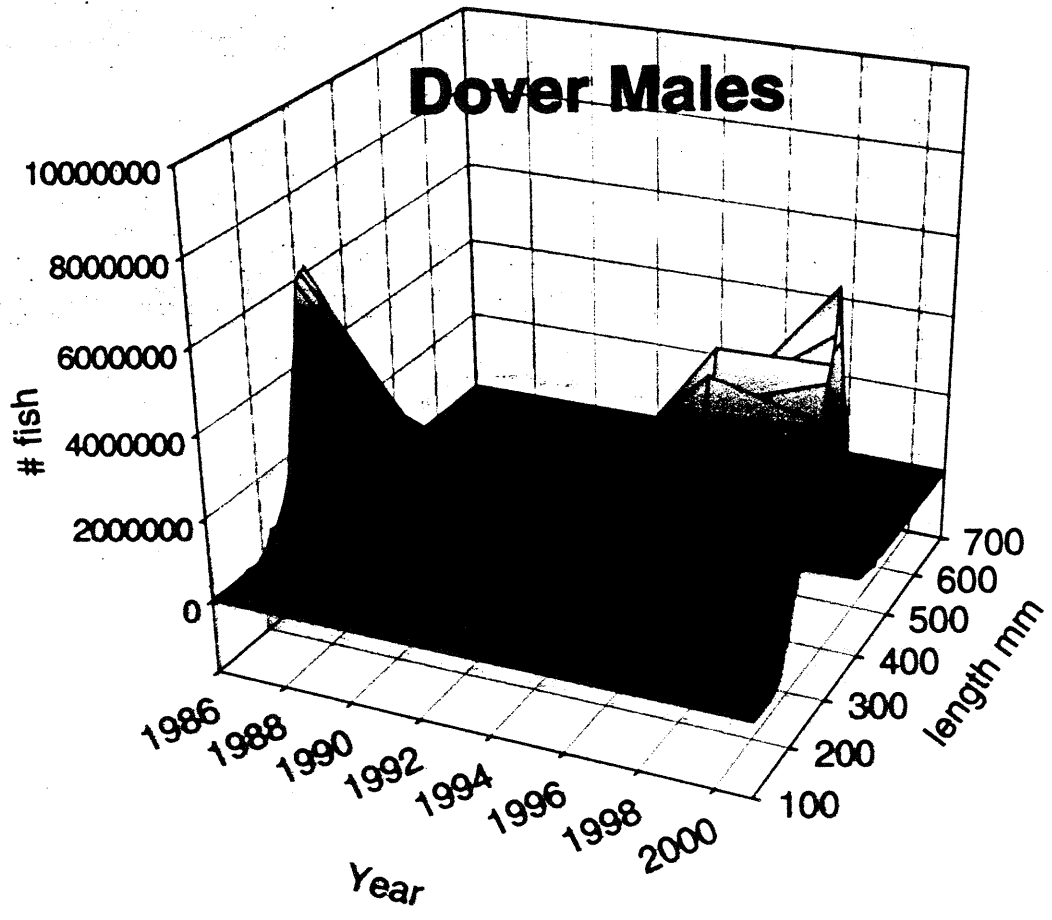
Sablefish



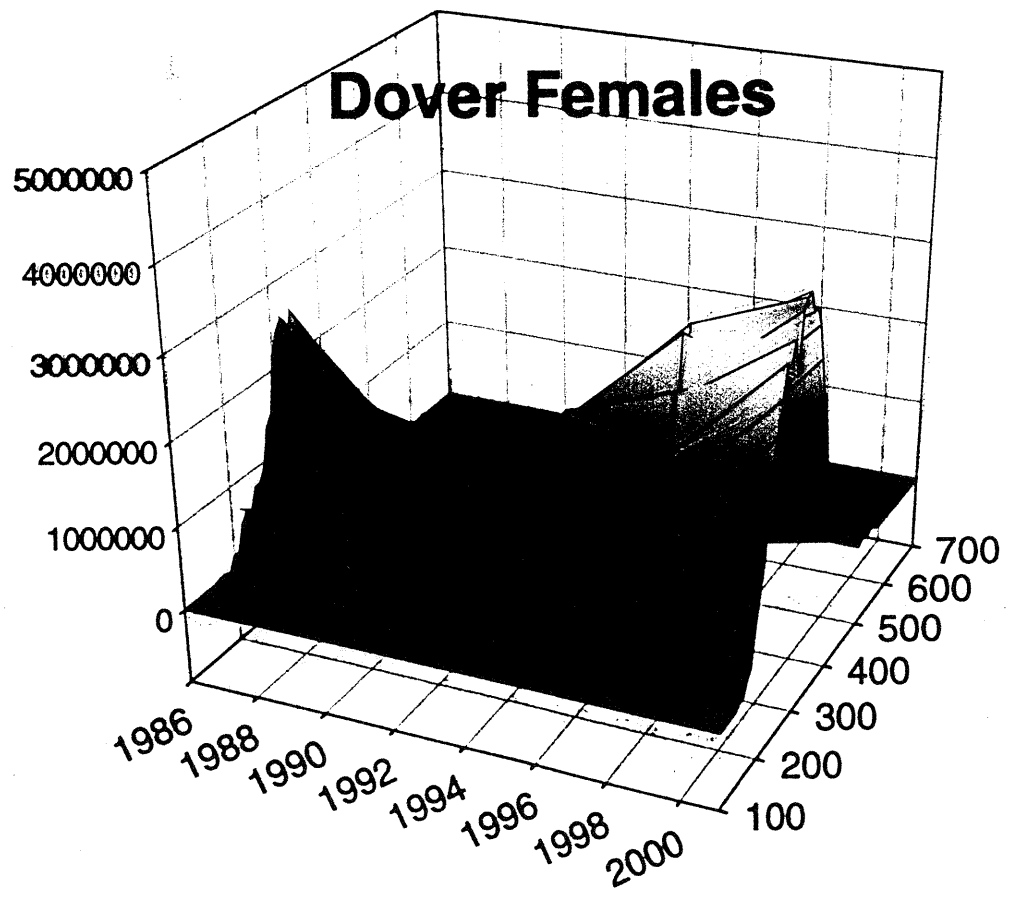
Sablefish
Cumulative percent change in biomass from 1998-2001



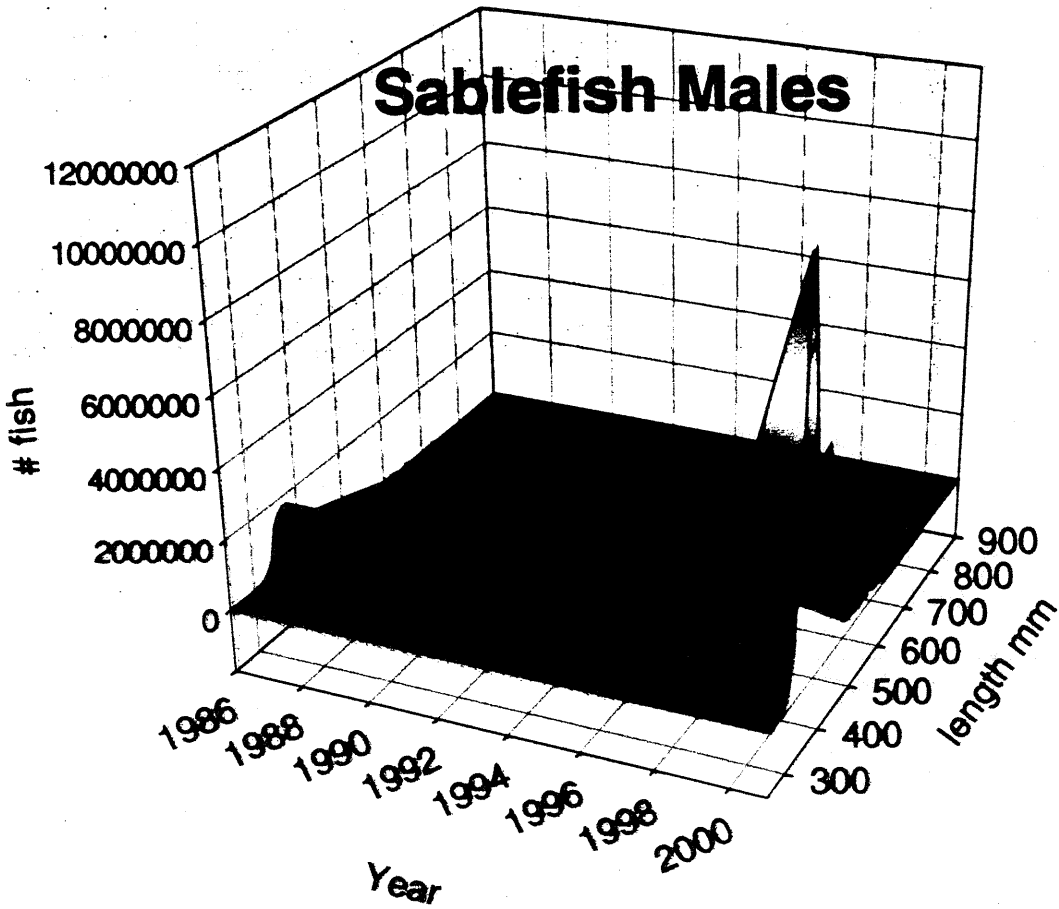
Dover Males



Dover Females



Sablefish Males



Sablefish Females

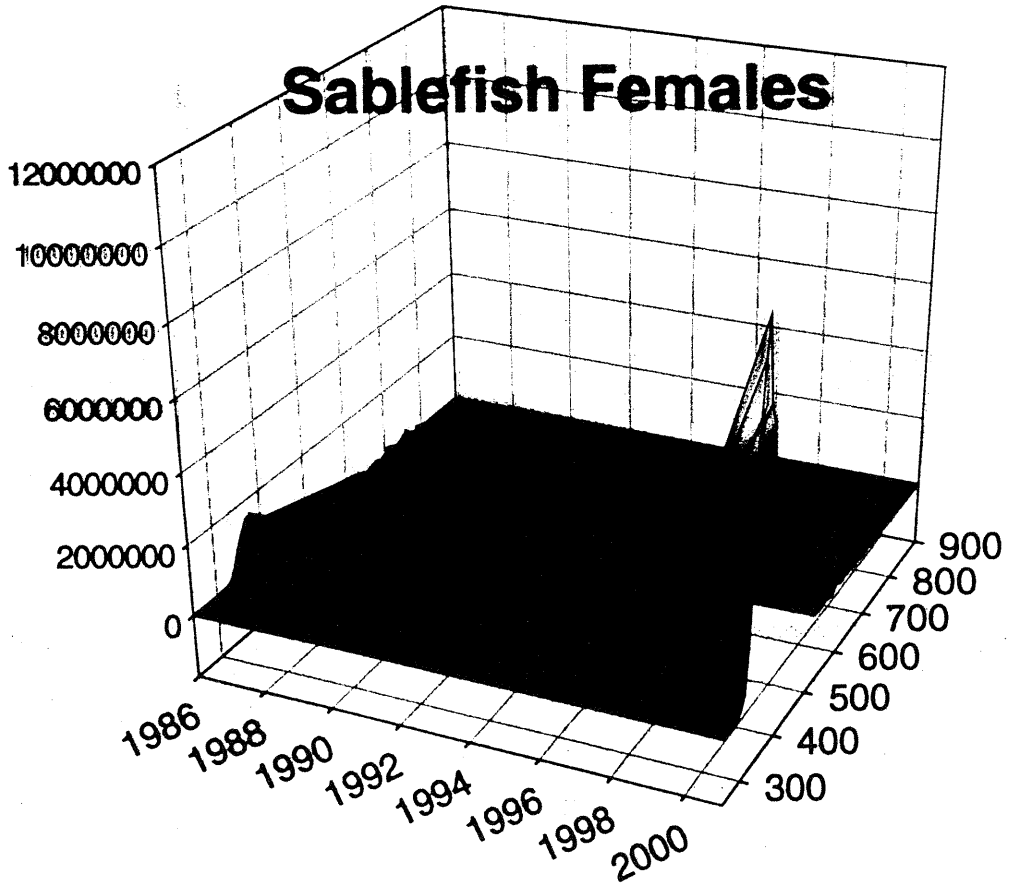


Table 1.--Estimated abundance of canary rockfish from the results of NMFS triennial bottom trawl surveys. These results include only U.S. waters and only the standard depth range (55-366 m) covered during all surveys since 1977.

INPFC Area	Year	Biomass (t)	CV (biomass)	Population (x 1,000)	CV (population)	Mean weight (kg)
US Vancouver						
	1977	19,887	0.98	8,935	0.98	2.23
	1980	2,588	0.90	1,290	0.98	2.01
	1983	4,638	0.41	2,316	0.38	2.00
	1986	3,202	0.40	1,920	0.39	1.67
	1989	3,787	0.36	2,154	0.36	1.75
	1992	590	0.42	435	0.49	1.36
	1995	60	0.44	50	0.45	1.20
	1998	458	0.26	280	0.23	1.64
	2001	661	0.66	664	0.78	1.00
Columbia						
	1977	6,193	0.31	2,985	0.30	2.07
	1980	2,955	0.35	1,403	0.35	2.11
	1983	6,318	0.36	5,287	0.44	1.20
	1986	5,399	0.48	3,076	0.39	1.78
	1989	3,372	0.58	2,679	0.55	1.26
	1992	1,278	0.51	1,198	0.54	1.07
	1995	1,922	0.55	1,386	0.50	1.39
	1998	252	0.21	259	0.24	0.97
	2001	2,295	0.62	2,322	0.73	0.99
Eureka						
	1977	38	0.47	17	0.49	2.24
	1980	1,263	0.91	637	0.91	1.96
	1983	367	0.27	287	0.33	1.28
	1986	746	0.44	484	0.41	1.61
	1989	124	0.43	53	0.38	2.34
	1992	17	0.52	15	0.44	1.13
	1995	63	0.53	66	0.59	0.95
	1998	146	0.28	115	0.26	1.27
	2001	161	0.40	118	0.41	1.36
Monterey						
	1977	759	0.64	344	0.65	2.21
	1980	218	0.63	113	0.48	1.93
	1983	7,481	0.66	4,290	0.60	1.74
	1986	1,240	0.56	840	0.49	1.48
	1989	731	0.44	1,062	0.50	0.89
	1992	88	0.43	236	0.43	0.37
	1995	1,095	0.83	692	0.65	1.58
	1998	670	0.71	649	0.71	1.03
	2001	96	0.55	102	0.55	0.94
Conception						
	1977	33	0.42	35	0.58	0.94
	1980	THE CONCEPTION AREA WAS NOT SAMPLED DURING THE 1980, 1983, AND 1986 TRIENNIAL SURVEYS.				
	1983	THE CONCEPTION AREA WAS NOT SAMPLED DURING THE 1980, 1983, AND 1986 TRIENNIAL SURVEYS.				
	1986	THE CONCEPTION AREA WAS NOT SAMPLED DURING THE 1980, 1983, AND 1986 TRIENNIAL SURVEYS.				
	1989	3	0.79	5	0.87	0.60
	1992	0		0		
	1995	Trace	1.00	2	1.00	
	1998	2	0.72	2	0.80	1.00
	2001	Trace		5	0.71	
US Total						
	1977	26,910	0.73	12,317	0.71	2.18
	1980	7,024	0.40	3,444	0.42	2.04
	1983	18,804	0.31	12,180	0.29	1.54
	1986	10,586	0.30	6,300	0.25	1.68
	1989	7,998	0.35	5,953	0.34	1.34
	1992	1,972	0.44	1,882	0.45	1.05
	1995	3,140	0.45	2,195	0.38	1.43
	1998	1,528	0.33	1,306	0.36	1.17
	2001	3,220	0.57	3,212	0.69	1.00

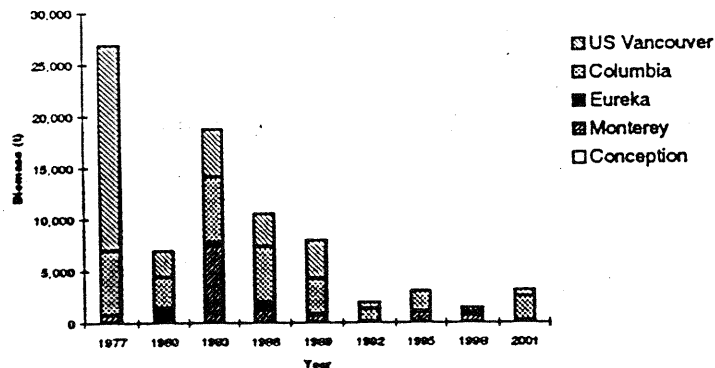
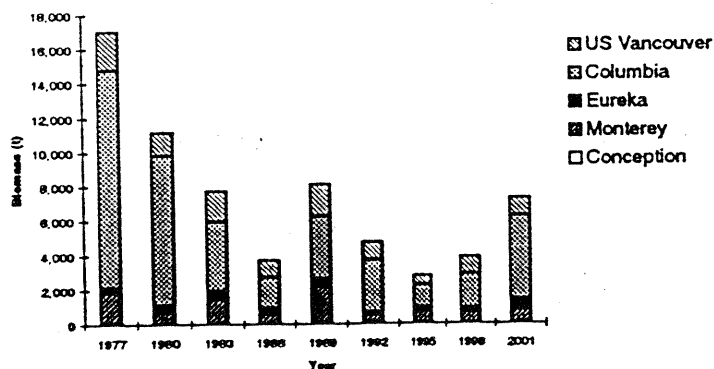


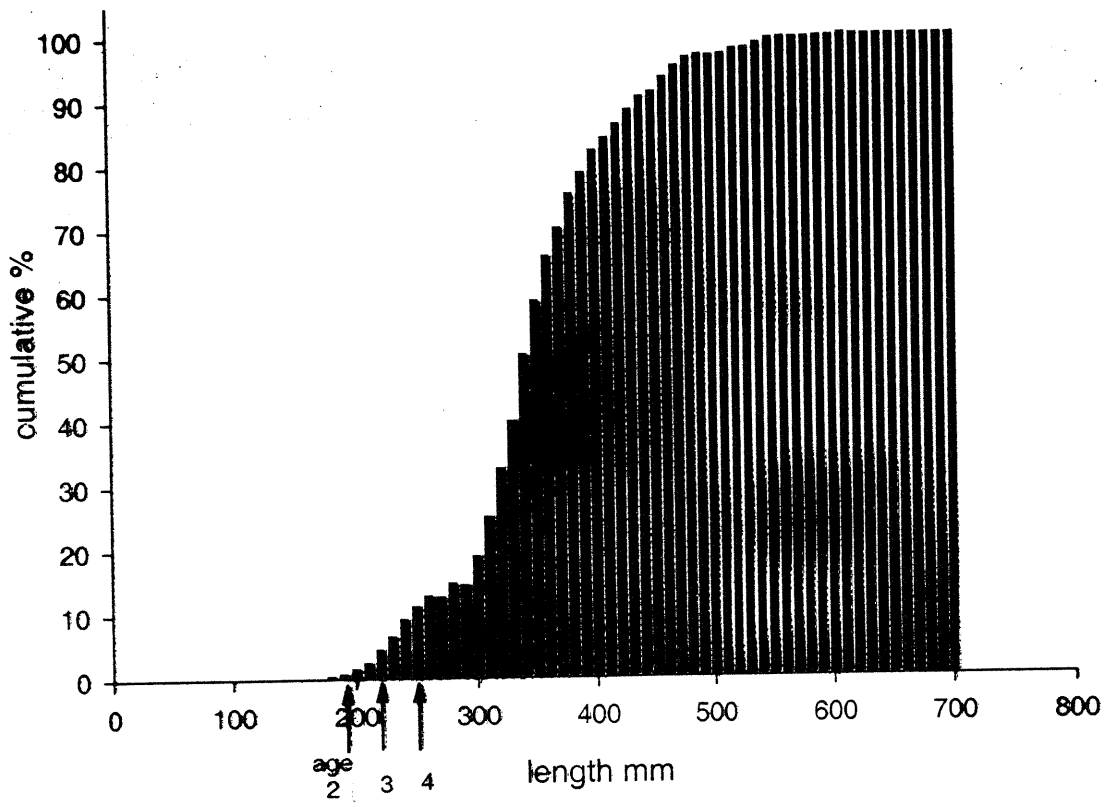
Table 1.—Estimated abundance of lingcod from the results of NMFS triennial bottom trawl surveys. These results include only U.S. waters and only the standard depth range (55-365 m) covered during all surveys since 1977.

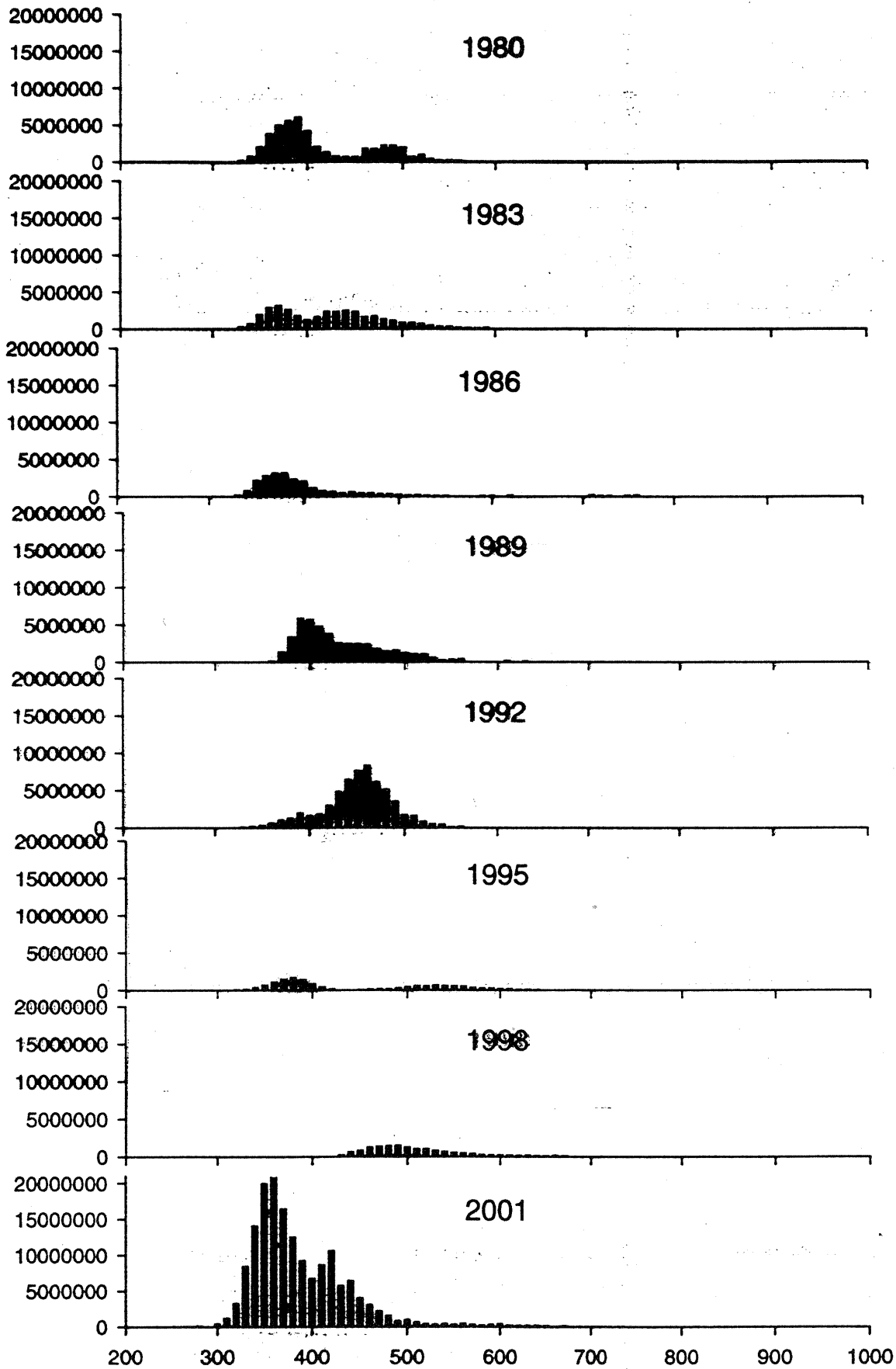
INPFC Area	CV	Population	CV	Mean weight	
Year	Biomass (t)	(biomass)	(population)	(kg)	
US Vancouver					
1977	2,277	0.68	276	0.53	8.25
1980	1,343	0.46	683	0.68	2.03
1983	1,805	0.21	408	0.20	4.41
1986	988	0.15	234	0.12	4.22
1989	1,863	0.23	533	0.27	3.50
1992	1,050	0.57	399	0.28	2.63
1995	552	0.27	237	0.26	2.33
1998	1,019	0.26	362	0.20	2.89
2001	1,021	0.36	604	0.23	1.69
Columbia					
1977	12,648	0.91	1,541	0.84	8.21
1980	8,714	0.74	1,137	0.62	7.66
1983	4,016	0.20	908	0.16	4.42
1986	1,828	0.16	507	0.13	3.61
1989	3,649	0.43	931	0.25	3.92
1992	3,071	0.64	1,351	0.23	2.27
1995	1,323	0.19	807	0.18	1.64
1998	2,002	0.38	732	0.21	2.73
2001	4,854	0.45	2,753	0.18	1.76
Eureka					
1977	274	0.38	44	0.44	6.23
1980	423	0.55	142	0.51	2.98
1983	498	0.38	111	0.26	4.49
1986	316	0.27	179	0.16	1.77
1989	473	0.31	164	0.33	2.88
1992	148	0.33	103	0.22	1.44
1995	182	0.25	117	0.23	1.56
1998	219	0.37	127	0.28	1.72
2001	642	0.16	545	0.13	1.18
Monterey					
1977	1,800	0.37	459	0.25	3.92
1980	714	0.32	287	0.24	2.49
1983	1,469	0.42	567	0.23	2.59
1986	911	0.29	382	0.16	1.60
1989	2,107	0.24	1,204	0.24	1.75
1992	484	0.30	654	0.22	0.74
1995	710	0.35	652	0.24	1.09
1998	651	0.34	567	0.37	1.15
2001	712	0.18	978	0.15	0.73
Conception					
1977	69	0.27	27	0.25	2.56
1980	THE CONCEPTION AREA WAS NOT SAMPLED DURING THE 1980, 1983, AND 1986 TRIENNIAL SURVEYS.				
1983	THE CONCEPTION AREA WAS NOT SAMPLED DURING THE 1980, 1983, AND 1986 TRIENNIAL SURVEYS.				
1986	THE CONCEPTION AREA WAS NOT SAMPLED DURING THE 1980, 1983, AND 1986 TRIENNIAL SURVEYS.				
1989	54	0.41	143	0.25	0.38
1992	27	0.43	66	0.39	0.41
1995	42	0.31	119	0.32	0.35
1998	34	0.38	46	0.35	0.74
2001	86	0.55	159	0.46	0.54
US Total					
1977	17,067	0.68	2,347	0.55	7.27
1980	11,194	0.58	2,229	0.38	5.02
1983	7,788	0.14	1,995	0.11	3.90
1986	3,742	0.11	1,302	0.09	2.87
1989	8,146	0.21	2,975	0.14	2.74
1992	4,780	0.54	2,573	0.17	1.86
1995	2,810	0.14	1,932	0.12	1.45
1998	3,925	0.25	1,824	0.16	2.15
2001	7,315	0.33	5,039	0.12	1.45



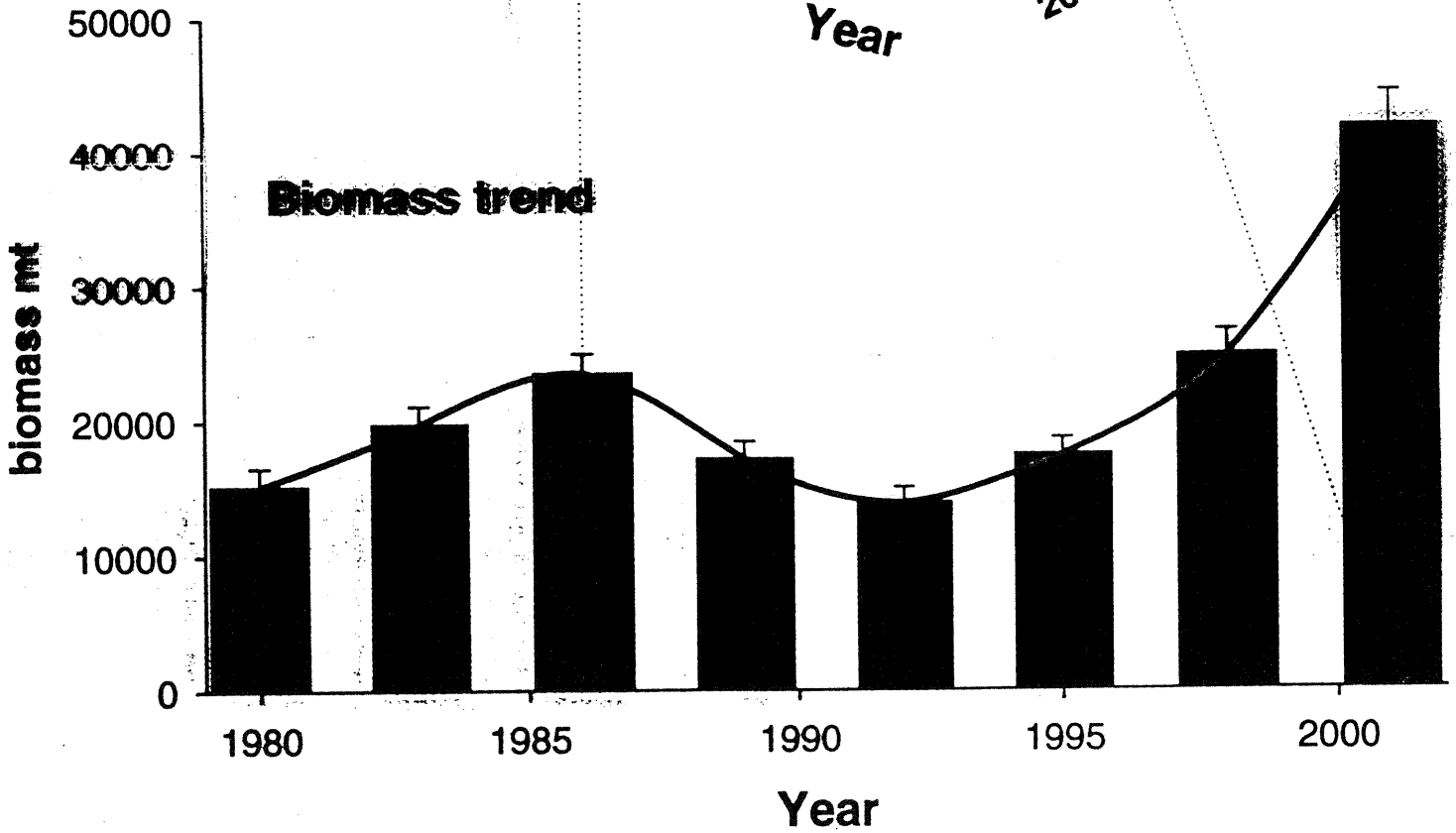
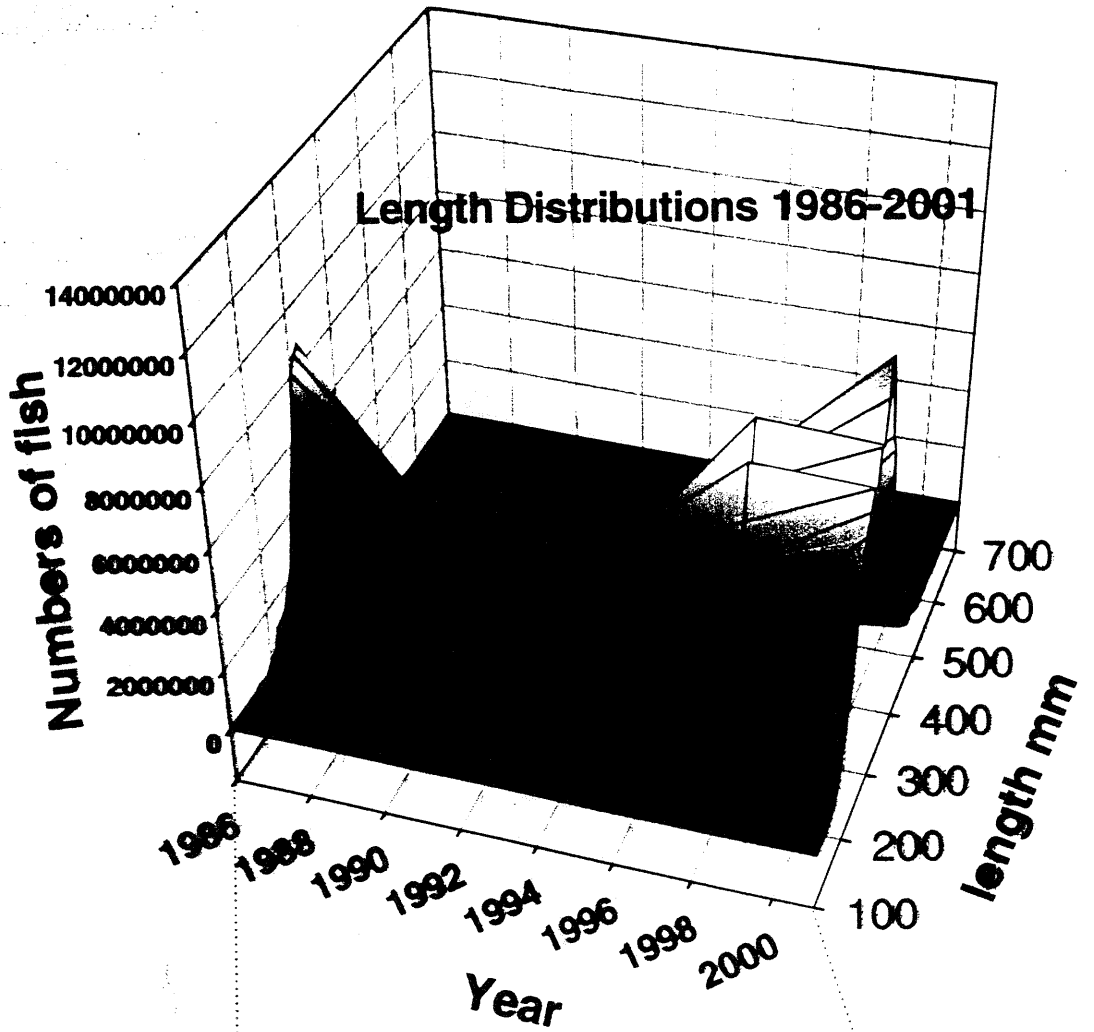
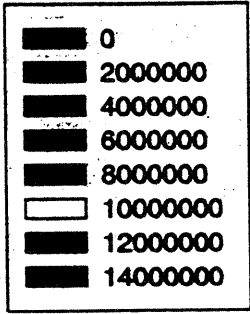
Dover

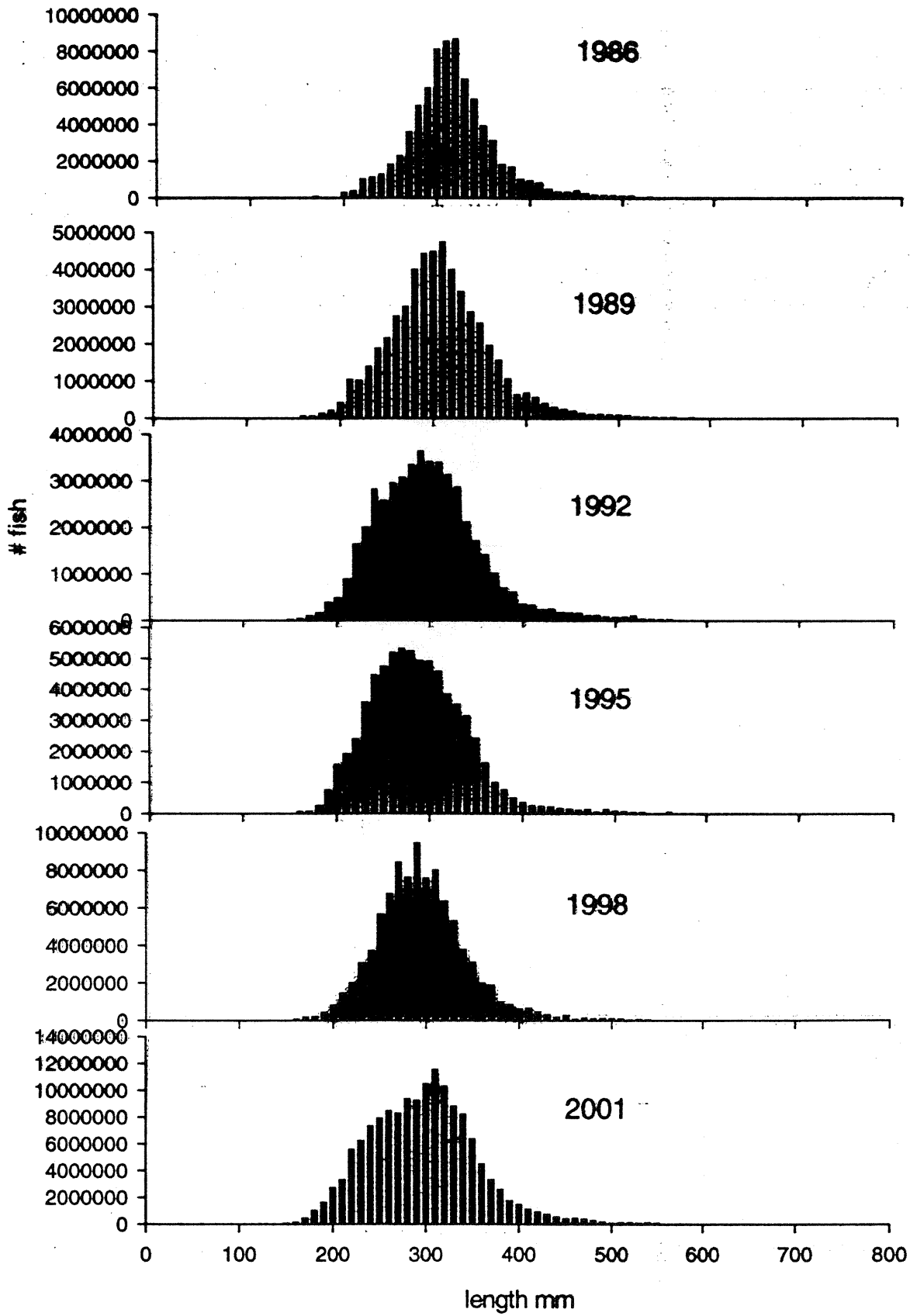
Cumulative percent increase in biomass from 1998-2001





Dover sole





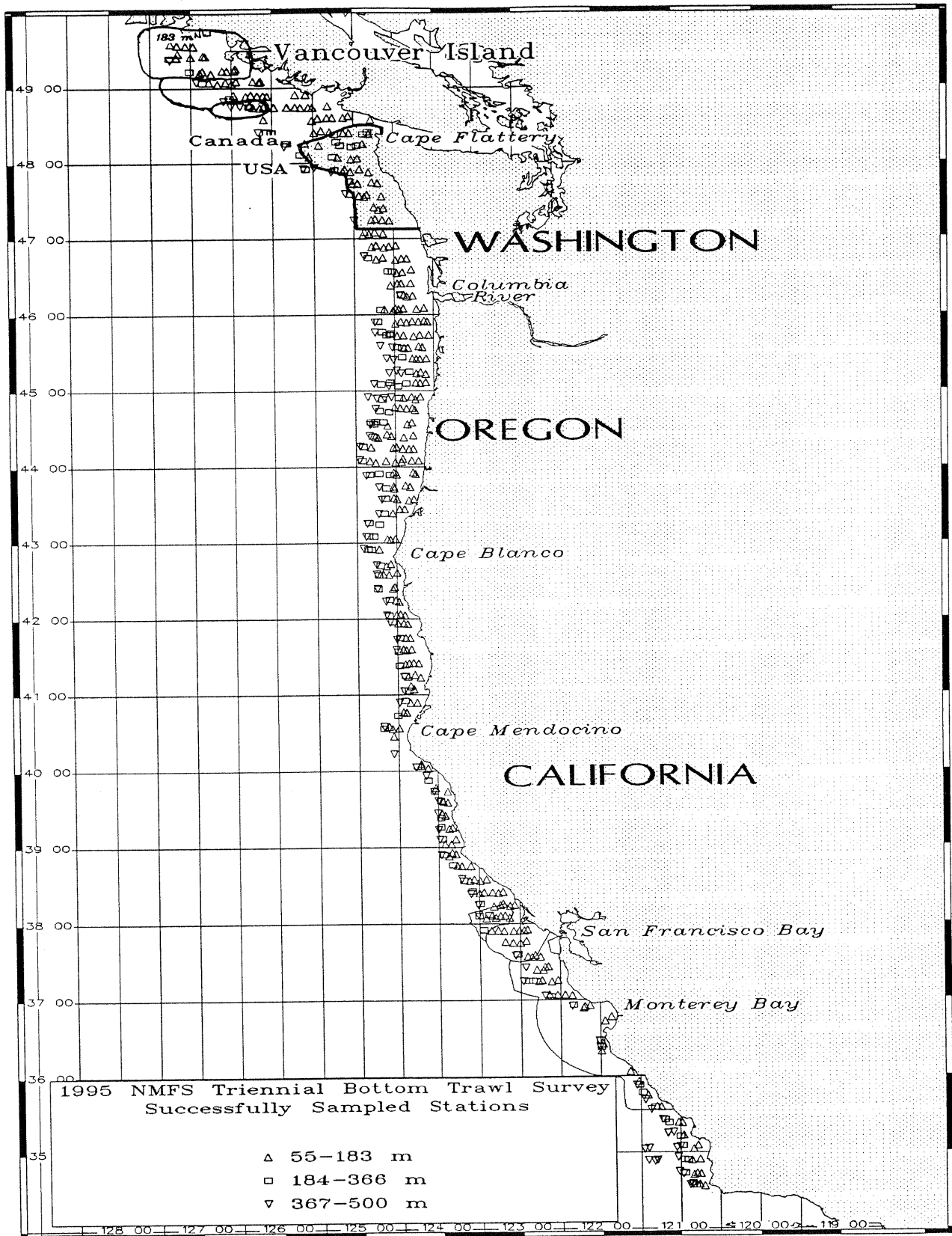


Figure 1.--Successful 1995 NMFS Triennial bottom trawl survey stations. Same stations are planned for 2001. Sanctuary boundaries are also shown on the chart.

Table 1.--Estimated abundance of canary rockfish from the results of NMFS triennial bottom trawl surveys. These results include only U.S. waters and only the standard depth range (55-366 m) covered during all surveys since 1977.

INPFC Area	Year	Biomass (t)	CV (biomass)	Population (x 1,000)	CV (population)	Mean weight (kg)
US Vancouver						
	1977	19,887	0.98	8,935	0.98	2.23
	1980	2,588	0.90	1,290	0.95	2.01
	1983	4,638	0.41	2,318	0.38	2.00
	1986	3,202	0.40	1,920	0.39	1.67
	1989	3,767	0.36	2,154	0.36	1.75
	1992	590	0.42	435	0.49	1.36
	1995	60	0.44	50	0.45	1.20
	1998	458	0.26	280	0.23	1.64
	2001	661	0.66	664	0.78	1.00
Columbia						
	1977	6,193	0.31	2,985	0.30	2.07
	1980	2,955	0.35	1,403	0.35	2.11
	1983	6,318	0.36	5,287	0.44	1.20
	1986	5,399	0.48	3,076	0.39	1.76
	1989	3,372	0.58	2,679	0.55	1.26
	1992	1,278	0.51	1,196	0.54	1.07
	1995	1,922	0.55	1,386	0.50	1.39
	1998	252	0.21	259	0.24	0.97
	2001	2,295	0.62	2,322	0.73	0.99
Eureka						
	1977	38	0.47	17	0.49	2.24
	1980	1,263	0.91	637	0.91	1.98
	1983	367	0.27	287	0.33	1.28
	1986	746	0.44	464	0.41	1.61
	1989	124	0.43	53	0.38	2.34
	1992	17	0.52	15	0.44	1.13
	1995	63	0.53	66	0.59	0.95
	1998	146	0.28	115	0.26	1.27
	2001	161	0.40	118	0.41	1.36
Monterey						
	1977	759	0.64	344	0.65	2.21
	1980	218	0.63	113	0.48	1.93
	1983	7,481	0.66	4,290	0.60	1.74
	1986	1,240	0.56	840	0.49	1.48
	1989	731	0.44	1,062	0.50	0.69
	1992	88	0.43	236	0.43	0.37
	1995	1,095	0.83	692	0.65	1.58
	1998	670	0.71	649	0.71	1.03
	2001	96	0.55	102	0.55	0.94
Conception						
	1977	33	0.42	35	0.58	0.94
	1980	THE CONCEPTION AREA WAS NOT SAMPLED DURING THE 1980, 1983, AND 1986 TRIENNIAL SURVEYS.				
	1983	THE CONCEPTION AREA WAS NOT SAMPLED DURING THE 1980, 1983, AND 1986 TRIENNIAL SURVEYS.				
	1986	THE CONCEPTION AREA WAS NOT SAMPLED DURING THE 1980, 1983, AND 1986 TRIENNIAL SURVEYS.				
	1989	3	0.79	5	0.87	0.60
	1992	0		0		
	1995	Trace	1.00	2	1.00	
	1998	2	0.72	2	0.80	1.00
	2001	Trace		5	0.71	
US Total						
	1977	26,910	0.73	12,317	0.71	2.18
	1980	7,024	0.40	3,444	0.42	2.04
	1983	18,804	0.31	12,180	0.29	1.54
	1986	10,586	0.30	6,300	0.25	1.68
	1989	7,998	0.35	5,953	0.34	1.34
	1992	1,972	0.44	1,882	0.45	1.05
	1995	3,140	0.45	2,195	0.38	1.43
	1998	1,528	0.33	1,306	0.36	1.17
	2001	3,220	0.57	3,212	0.69	1.00

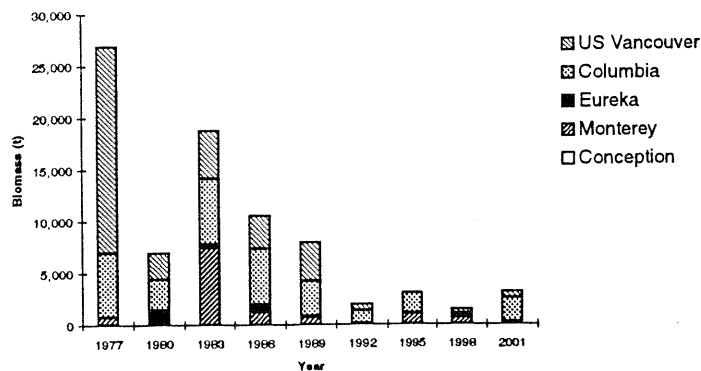


Table 1.--Estimated abundance of Dover sole from the results of NMFS triennial bottom trawl surveys. These results include only U.S. waters and only the standard depth range (55-366 m) covered during all surveys since 1977.

INPFC Area	Year	Biomass (t)	CV (biomass)	Population (x 1,000)	CV (population)	Mean weight (kg)
US Vancouver						
	1977	1,907	0.14	3,223	0.16	0.59
	1980	2,157	0.26	3,608	0.24	0.60
	1983	1,714	0.20	3,822	0.23	0.45
	1986	1,340	0.21	3,364	0.24	0.40
	1989	1,928	0.14	4,574	0.14	0.42
	1992	1,911	0.17	5,311	0.16	0.36
	1995	2,519	0.13	7,098	0.12	0.35
	1998	3,505	0.11	9,836	0.11	0.36
	2001	6,368	0.13	15,900	0.12	0.40
Columbia						
	1977	8,486	0.08	15,069	0.09	0.56
	1980	4,903	0.13	11,289	0.13	0.43
	1983	9,141	0.10	26,752	0.12	0.34
	1986	9,798	0.09	30,901	0.09	0.32
	1989	6,785	0.11	21,839	0.12	0.31
	1992	8,384	0.10	28,105	0.10	0.30
	1995	8,554	0.10	32,733	0.09	0.26
	1998	12,914	0.11	48,193	0.13	0.27
	2001	22,790	0.09	79,062	0.09	0.29
Eureka						
	1977	1,211	0.31	1,873	0.42	0.65
	1980	866	0.23	2,021	0.25	0.43
	1983	2,685	0.15	7,615	0.16	0.35
	1986	4,250	0.12	14,798	0.11	0.29
	1989	2,923	0.22	8,775	0.23	0.33
	1992	1,767	0.28	5,500	0.24	0.32
	1995	1,597	0.23	5,957	0.26	0.27
	1998	4,624	0.17	18,467	0.18	0.25
	2001	4,698	0.18	16,913	0.17	0.28
Monterey						
	1977	4,050	0.09	9,764	0.07	0.41
	1980	2,708	0.20	7,171	0.20	0.38
	1983	5,368	0.14	20,038	0.16	0.27
	1986	7,931	0.12	27,722	0.12	0.29
	1989	4,421	0.14	18,072	0.14	0.24
	1992	1,728	0.24	8,188	0.23	0.21
	1995	4,749	0.15	23,445	0.13	0.20
	1998	3,780	0.20	16,956	0.18	0.22
	2001	7,945	0.12	35,671	0.12	0.22
Conception						
	1977	1,516	0.11	3,254	0.11	0.47
	1980	THE CONCEPTION AREA WAS NOT SAMPLED DURING THE 1980, 1983, AND 1986 TRIENNIAL SURVEYS.				
	1983	THE CONCEPTION AREA WAS NOT SAMPLED DURING THE 1980, 1983, AND 1986 TRIENNIAL SURVEYS.				
	1986	THE CONCEPTION AREA WAS NOT SAMPLED DURING THE 1980, 1983, AND 1986 TRIENNIAL SURVEYS.				
	1989	1,312	0.58	4,393	0.52	0.30
	1992	99	0.61	452	0.62	0.22
	1995	1,071	0.38	4,352	0.35	0.25
	1998	332	0.46	2,266	0.40	0.15
	2001	2,680	0.22	13,283	0.21	0.20
US Total						
	1977	17,170	0.05	33,182	0.05	0.52
	1980	10,635	0.10	24,089	0.10	0.44
	1983	18,907	0.07	58,227	0.08	0.32
	1986	23,320	0.08	76,786	0.08	0.30
	1989	17,369	0.08	57,654	0.08	0.30
	1992	13,888	0.08	47,556	0.08	0.29
	1995	18,490	0.07	73,584	0.07	0.25
	1998	25,155	0.07	95,718	0.08	0.26
	2001	44,481	0.06	160,829	0.06	0.28

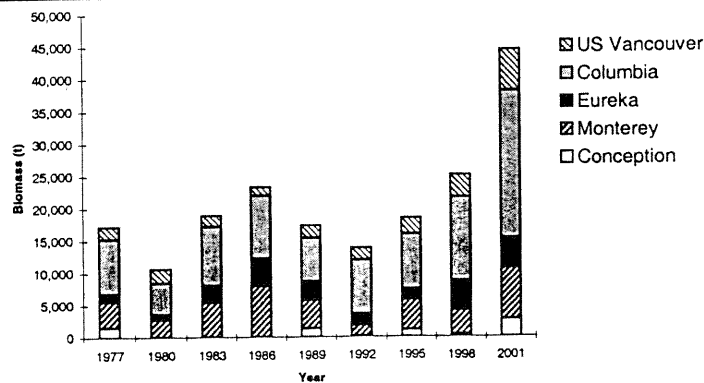


Table 1.—Estimated abundance of yellowtail rockfish from the results of NMFS triennial bottom trawl surveys. These results include only U.S. waters and only the standard depth range (55-366 m) covered during all surveys since 1977.

INPFC Area	Year	Biomass (t)	CV (biomass)	Population (x 1,000)	CV (population)	Mean weight (Kg)
US Vancouver						
	1977	11,451	0.58	7,625	0.57	1.50
	1980	4,979	0.68	3,096	0.68	1.61
	1983	4,666	0.90	3,080	0.89	1.51
	1986	2,592	0.38	1,853	0.35	1.40
	1989	9,443	0.80	6,331	0.81	1.49
	1992	5,174	0.47	4,399	0.51	1.18
	1995	1,525	0.63	1,151	0.62	1.32
	1998	16,212	0.34	14,674	0.33	1.10
	2001	4,019	0.31	2,708	0.31	1.48
Columbia						
	1977	11,800	0.42	7,021	0.41	1.68
	1980	5,284	0.56	3,471	0.54	1.52
	1983	6,718	0.28	5,809	0.29	1.16
	1986	5,475	0.32	5,313	0.47	1.03
	1989	7,031	0.51	5,100	0.52	1.38
	1992	5,398	0.39	3,920	0.41	1.38
	1995	1,384	0.57	1,996	0.78	0.69
	1998	6,017	0.21	5,461	0.22	1.10
	2001	1,115	0.56	854	0.53	1.31
Eureka						
	1977	661	0.66	426	0.65	1.55
	1980	522	0.57	340	0.58	1.54
	1983	673	0.54	634	0.53	1.06
	1986	1,086	0.50	1,228	0.48	0.88
	1989	387	0.70	244	0.66	1.59
	1992	74	0.56	57	0.47	1.30
	1995	31	0.55	41	0.62	0.76
	1998	385	0.84	480	0.87	0.80
	2001	24	0.71	34	0.74	0.71
Monterey						
	1977	683	0.58	514	0.64	1.33
	1980	205	0.62	227	0.57	0.90
	1983	1,586	0.80	2,331	0.68	0.68
	1986	2,222	0.56	2,500	0.55	0.89
	1989	880	0.67	1,229	0.71	0.72
	1992	652	0.70	980	0.64	0.67
	1995	408	0.67	470	0.70	0.87
	1998	3,858	0.67	4,276	0.67	0.90
	2001	75	0.79	86	0.80	0.87
Conception						
	1977	2	0.76	3	0.68	0.67
	1980	THE CONCEPTION AREA WAS NOT SAMPLED DURING THE 1980, 1983, AND 1986 TRIENNIAL SURVEYS.				
	1983	THE CONCEPTION AREA WAS NOT SAMPLED DURING THE 1980, 1983, AND 1986 TRIENNIAL SURVEYS.				
	1986	THE CONCEPTION AREA WAS NOT SAMPLED DURING THE 1980, 1983, AND 1986 TRIENNIAL SURVEYS.				
	1989	0		0		
	1992	147	1.00	157	1.00	0.94
	1995	29	0.91	186	0.97	0.16
	1998	0		0		
	2001	17	1.00	20	1.00	0.85
US Total						
	1977	24,598	0.34	15,588	0.34	1.58
	1980	10,989	0.41	7,134	0.40	1.54
	1983	13,643	0.35	11,853	0.30	1.15
	1986	11,375	0.25	10,893	0.31	1.04
	1989	17,742	0.48	12,903	0.45	1.38
	1992	11,446	0.30	9,513	0.31	1.20
	1995	3,377	0.38	3,843	0.46	0.88
	1998	26,472	0.24	24,890	0.23	1.06
	2001	5,249	0.26	3,703	0.26	1.42

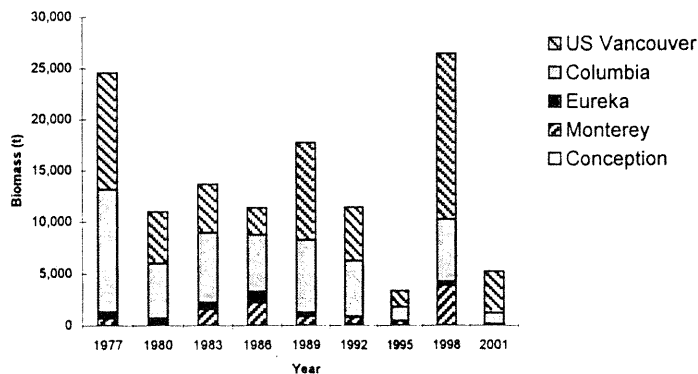


Table 1.--Estimated abundance of bocaccio from the results of NMFS triennial bottom trawl surveys.
 These results include only U.S. waters and only the standard depth range (55-366 m) covered during all surveys since 1977.

INPFC Area	Year	Biomass (t)	CV (biomass)	Population (x 1,000)	CV (population)	Mean weight (kg)
US Vancouver						
	1977	1,617	0.89	763	0.92	2.12
	1980	159	0.61	28	0.70	5.68
	1983	332	0.46	156	0.51	2.13
	1986	116	0.35	32	0.36	3.63
	1989	14,318	0.99	2,894	0.99	4.95
	1992	197	0.74	45	0.67	4.38
	1995	11	0.63	2	0.50	5.50
	1998	143	0.36	34	0.33	4.21
	2001	7	0.84	1	0.72	7.00
Columbia						
	1977	906	0.35	201	0.31	4.51
	1980	516	0.33	348	0.33	1.48
	1983	590	0.31	248	0.31	2.38
	1986	539	0.54	199	0.55	2.71
	1989	59	0.52	16	0.54	3.69
	1992	74	0.80	20	0.71	3.70
	1995	32	0.81	15	0.79	2.13
	1998	0		0		
	2001	68	0.49	15	0.45	4.53
Eureka						
	1977	22	0.71	15	0.86	1.47
	1980	761	0.38	689	0.44	1.10
	1983	318	0.41	194	0.40	1.64
	1986	2,057	0.75	978	0.49	2.10
	1989	41	0.45	19	0.42	2.16
	1992	21	0.66	11	0.68	1.91
	1995	11	0.69	7	0.58	1.57
	1998	0		0		
	2001	27	0.58	6	0.58	4.50
Monterey						
	1977	6,084	0.41	3,320	0.31	1.83
	1980	3,502	0.35	3,813	0.34	0.92
	1983	6,187	0.64	3,014	0.60	2.05
	1986	4,591	0.78	2,190	0.51	2.10
	1989	968	0.34	2,046	0.36	0.47
	1992	502	0.48	691	0.56	0.73
	1995	486	0.51	340	0.41	1.43
	1998	130	0.38	129	0.47	1.01
	2001	132	0.34	140	0.41	0.94
Conception						
	1977	804	0.49	748	0.49	1.07
	1980	THE CONCEPTION AREA WAS NOT SAMPLED DURING THE 1980, 1983, AND 1986 TRIENNIAL SURVEYS.				
	1983	THE CONCEPTION AREA WAS NOT SAMPLED DURING THE 1980, 1983, AND 1986 TRIENNIAL SURVEYS.				
	1986	THE CONCEPTION AREA WAS NOT SAMPLED DURING THE 1980, 1983, AND 1986 TRIENNIAL SURVEYS.				
	1989	8,598	0.89	34,439	0.88	0.25
	1992	790	0.90	839	0.84	0.94
	1995	58	0.56	189	0.76	0.31
	1998	10	0.32	22	0.32	0.45
	2001	51	0.45	87	0.44	0.59
US Total						
	1977	9,434	0.31	5,046	0.26	1.87
	1980	4,938	0.26	4,878	0.27	1.01
	1983	7,427	0.53	3,612	0.51	2.06
	1986	7,303	0.70	3,400	0.47	2.15
	1989	23,984	0.67	39,413	0.77	0.61
	1992	1,584	0.49	1,606	0.50	0.99
	1995	598	0.42	553	0.36	1.08
	1998	283	0.25	185	0.34	1.53
	2001	286	0.22	249	0.28	1.15

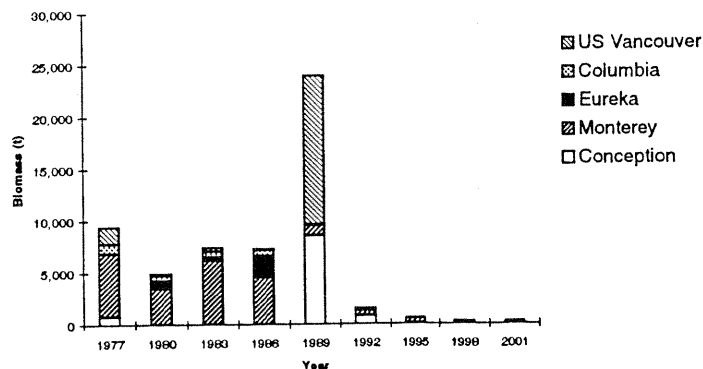


Table 1.—Estimated abundance of darkblotched rockfish from the results of NMFS triennial bottom trawl surveys. These results include only U.S. waters and only the standard depth range (55-366 m) covered during all surveys since 1977.

INPFC Area	Year	Biomass (t)	CV (biomass)	Population (x 1,000)	CV (population)	Mean weight (kg)
US Vancouver						
	1977	176	0.43	430	0.32	0.41
	1980	59	0.48	109	0.44	0.54
	1983	297	0.63	1,886	0.76	0.16
	1986	981	0.76	2,579	0.64	0.38
	1989	213	0.25	1,080	0.21	0.20
	1992	331	0.37	1,354	0.32	0.24
	1995	422	0.29	1,166	0.27	0.36
	1998	358	0.34	1,395	0.32	0.26
	2001	824	0.64	1,629	0.55	0.51
Columbia						
	1977	1,881	0.16	4,131	0.15	0.46
	1980	1,477	0.37	4,933	0.39	0.30
	1983	6,836	0.40	18,503	0.21	0.37
	1986	3,090	0.38	8,143	0.29	0.38
	1989	1,452	0.20	9,512	0.14	0.15
	1992	5,771	0.52	17,098	0.43	0.34
	1995	4,165	0.75	7,480	0.44	0.56
	1998	1,710	0.23	6,915	0.21	0.25
	2001	2,129	0.56	6,824	0.30	0.31
Eureka						
	1977	471	0.27	621	0.25	0.76
	1980	1,119	0.36	1,275	0.26	0.88
	1983	878	0.32	1,849	0.23	0.47
	1986	1,220	0.46	1,523	0.36	0.80
	1989	1,148	0.37	3,034	0.27	0.38
	1992	440	0.33	1,273	0.32	0.35
	1995	209	0.37	642	0.29	0.33
	1998	365	0.45	1,240	0.52	0.29
	2001	247	0.27	1,423	0.30	0.17
Monterey						
	1977	1,362	0.45	3,609	0.57	0.38
	1980	701	0.65	817	0.53	0.86
	1983	1,041	0.38	2,084	0.34	0.50
	1986	2,059	0.46	2,602	0.37	0.79
	1989	268	0.34	899	0.27	0.30
	1992	301	0.53	687	0.43	0.44
	1995	464	0.39	690	0.32	0.67
	1998	127	0.58	295	0.43	0.43
	2001	276	0.44	1,669	0.55	0.17
Conception						
	1977	33	0.50	42	0.41	0.79
	1980					
	1983					
	1986					
	1989	4	0.48	12	0.42	0.33
	1992	0		0		
	1995	1	0.67	5	0.67	0.20
	1998	0		0		
	2001	2	0.53	14	0.52	0.14
US Total						
	1977	3,923	0.17	8,834	0.24	0.44
	1980	3,356	0.24	7,134	0.28	0.47
	1983	9,052	0.30	24,322	0.17	0.37
	1986	7,350	0.32	14,846	0.28	0.50
	1989	3,085	0.17	14,537	0.12	0.21
	1992	6,842	0.44	20,418	0.37	0.34
	1995	5,261	0.59	9,983	0.34	0.53
	1998	2,560	0.18	9,845	0.18	0.26
	2001	3,479	0.46	11,560	0.25	0.30

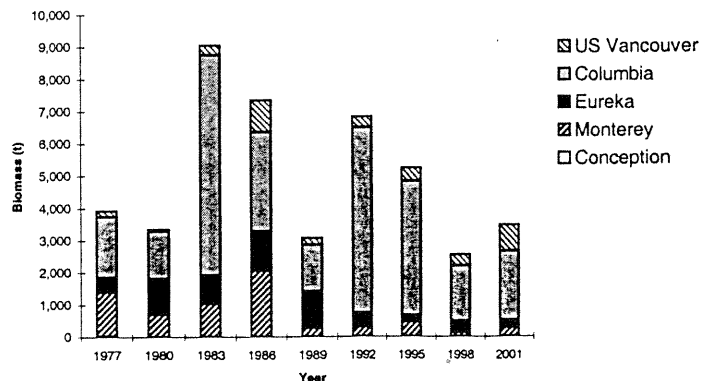


Table 1.--Estimated abundance of shortspine thornyhead from the results of NMFS triennial bottom trawl surveys. These results include only U.S. waters and only the standard depth range (55-366 m) covered during all surveys since 1977.

INPFC Area	CV	Population	CV	Mean weight	
Year	Biomass (t)	(biomass)	(x 1,000)	(population)	(kg)
US Vancouver					
1977	227	0.15	621	0.15	0.37
1980	294	0.24	872	0.29	0.34
1983	265	0.35	1,037	0.33	0.26
1986	203	0.33	960	0.40	0.21
1989	283	0.24	1,689	0.32	0.17
1992	306	0.36	1,989	0.34	0.15
1995	463	0.22	2,749	0.19	0.17
1998	294	0.29	1,291	0.27	0.23
2001	320	0.21	1,342	0.21	0.24
Columbia					
1977	1,610	0.11	4,423	0.11	0.36
1980	953	0.23	2,750	0.23	0.35
1983	1,663	0.15	8,619	0.17	0.19
1986	1,562	0.21	9,017	0.27	0.17
1989	939	0.22	5,295	0.23	0.18
1992	1,334	0.20	10,237	0.22	0.13
1995	1,582	0.25	12,663	0.22	0.12
1998	1,925	0.24	14,786	0.26	0.13
2001	1,895	0.16	14,478	0.20	0.13
Eureka					
1977	82	0.44	236	0.46	0.35
1980	89	0.33	304	0.30	0.29
1983	304	0.32	1,864	0.29	0.16
1986	131	0.22	875	0.25	0.15
1989	219	0.27	1,381	0.21	0.16
1992	140	0.42	959	0.35	0.15
1995	225	0.37	1,874	0.31	0.12
1998	106	0.25	1,328	0.31	0.08
2001	170	0.15	1,160	0.16	0.15
Monterey					
1977	157	0.23	523	0.20	0.30
1980	115	0.57	342	0.47	0.34
1983	145	0.26	815	0.26	0.18
1986	165	0.29	1,061	0.32	0.16
1989	225	0.25	1,420	0.24	0.16
1992	145	0.23	920	0.24	0.16
1995	285	0.34	1,726	0.28	0.17
1998	128	0.29	957	0.29	0.13
2001	227	0.24	1,182	0.24	0.19
Conception					
1977	36	0.19	137	0.19	0.26
1980	THE CONCEPTION AREA WAS NOT SAMPLED DURING THE 1980, 1983, AND 1986 TRIENNIAL SURVEYS.				
1983	THE CONCEPTION AREA WAS NOT SAMPLED DURING THE 1980, 1983, AND 1986 TRIENNIAL SURVEYS.				
1986	THE CONCEPTION AREA WAS NOT SAMPLED DURING THE 1980, 1983, AND 1986 TRIENNIAL SURVEYS.				
1989	88	0.60	433	0.58	0.20
1992	6	0.08	64	0.05	0.09
1995	18	0.39	96	0.41	0.19
1998	2	0.56	14	0.62	0.14
2001	45	0.48	219	0.56	0.21
US Total					
1977	2,109	0.09	5,971	0.09	0.35
1980	1,452	0.17	4,268	0.17	0.34
1983	2,377	0.12	12,335	0.13	0.19
1986	2,061	0.17	11,912	0.22	0.17
1989	1,754	0.14	10,218	0.14	0.17
1992	1,933	0.15	14,168	0.17	0.14
1995	2,573	0.17	19,107	0.15	0.13
1998	2,455	0.19	18,376	0.21	0.13
2001	2,657	0.12	18,380	0.16	0.14

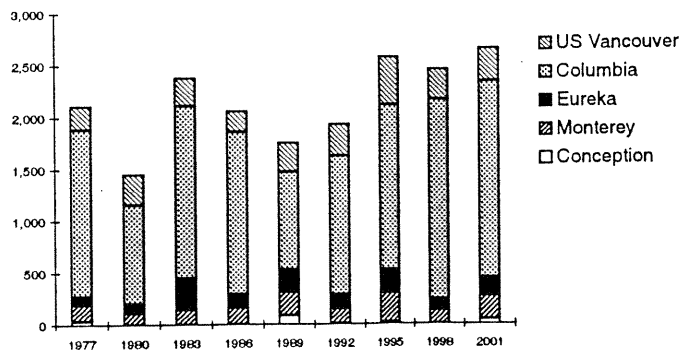


Table 1.--Estimated abundance of Pacific ocean perch from the results of NMFS triennial bottom trawl surveys. These results include only U.S. waters and only the standard depth range (55-366 m) covered during all surveys since 1977.

INPFC Area	CV	Population	CV	Mean weight	
Year	Biomass (t)	(biomass)	(x 1,000)	(population)	(kg)
US Vancouver					
1977	7,590	0.64	7,026	0.54	1.08
1980	3,260	0.60	3,228	0.56	1.01
1983	3,775	0.38	3,709	0.31	1.02
1986	1,100	0.39	1,418	0.38	0.78
1989	7,719	0.55	12,371	0.53	0.62
1992	5,359	0.65	7,029	0.51	0.76
1995	3,454	0.65	4,089	0.54	0.84
1998	4,486	0.45	5,136	0.38	0.87
2001	6,605	0.90	7,136	0.81	0.93
Columbia					
1977	6,656	0.21	8,144	0.19	0.82
1980	3,692	0.36	4,646	0.38	0.79
1983	2,913	0.43	3,149	0.40	0.93
1986	1,404	0.69	2,697	0.58	0.52
1989	1,520	0.54	2,879	0.50	0.53
1992	2,243	0.46	4,339	0.41	0.52
1995	318	0.48	948	0.54	0.34
1998	2,824	0.47	5,134	0.42	0.55
2001	1,579	0.67	2,718	0.61	0.58
Eureka					
1977	230	0.38	375	0.36	0.61
1980	281	0.42	402	0.42	0.70
1983	321	0.46	474	0.42	0.68
1986	123	0.62	126	0.58	0.98
1989	251	0.40	380	0.40	0.66
1992	65	0.58	307	0.51	0.21
1995	273	0.43	406	0.41	0.67
1998	77	0.41	241	0.60	0.32
2001	24	0.52	35	0.42	0.69
Monterey					
1977	1	0.40	2	0.38	0.50
1980	5	0.72	24	0.87	0.21
1983	6	0.94	12	0.77	0.50
1986	200	0.65	204	0.61	0.98
1989	0		0		
1992	3	0.84	11	0.77	0.27
1995	12	0.79	13	0.71	0.92
1998	6	0.59	9	0.59	0.67
2001	7	0.51	9	0.49	0.78
Conception					
1977	0		0		
1980	THE CONCEPTION AREA WAS NOT SAMPLED DURING THE 1980, 1983, AND 1986 TRIENNIAL SURVEYS.				
1983	THE CONCEPTION AREA WAS NOT SAMPLED DURING THE 1980, 1983, AND 1986 TRIENNIAL SURVEYS.				
1986	THE CONCEPTION AREA WAS NOT SAMPLED DURING THE 1980, 1983, AND 1986 TRIENNIAL SURVEYS.				
1989	0		0		
1992	0		0		
1995	0		0		
1998	0		0		
2001	0		0		
US Total					
1977	14,476	0.34	15,547	0.26	0.93
1980	7,237	0.33	8,300	0.31	0.87
1983	7,016	0.27	7,344	0.23	0.96
1986	2,826	0.40	4,445	0.40	0.64
1989	9,490	0.46	15,630	0.43	0.61
1992	7,670	0.48	11,685	0.35	0.66
1995	4,057	0.55	5,456	0.41	0.74
1998	7,392	0.33	10,521	0.28	0.70
2001	8,215	0.74	9,897	0.62	0.83

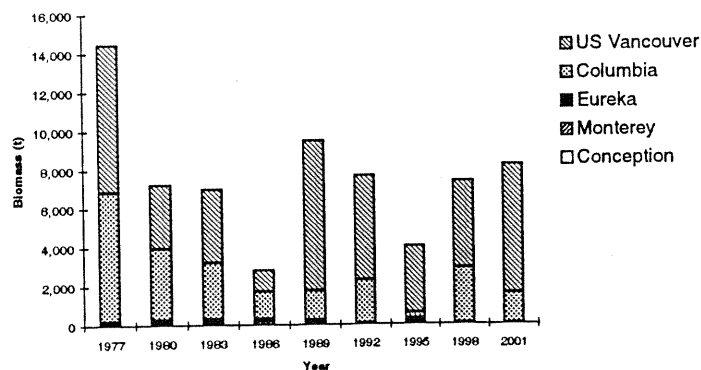


Table 1.--Estimated abundance of lingcod from the results of NMFS triennial bottom trawl surveys. These results include only U.S. waters and only the standard depth range (55-366 m) covered during all surveys since 1977.

INPFC Area	Biomass (t)	CV (biomass)	Population (x 1,000)	CV (population)	Mean weight (kg)
US Vancouver					
1977	2,277	0.68	276	0.53	8.25
1980	1,343	0.46	663	0.68	2.03
1983	1,805	0.21	409	0.20	4.41
1986	988	0.15	234	0.12	4.22
1989	1,863	0.23	533	0.27	3.50
1992	1,050	0.57	399	0.28	2.63
1995	552	0.27	237	0.26	2.33
1998	1,019	0.26	352	0.20	2.89
2001	1,021	0.36	604	0.23	1.69
Columbia					
1977	12,648	0.91	1,541	0.84	8.21
1980	8,714	0.74	1,137	0.62	7.66
1983	4,016	0.20	908	0.16	4.42
1986	1,828	0.16	507	0.13	3.61
1989	3,649	0.43	931	0.25	3.92
1992	3,071	0.64	1,351	0.23	2.27
1995	1,323	0.19	807	0.18	1.64
1998	2,002	0.38	732	0.21	2.73
2001	4,854	0.45	2,753	0.18	1.76
Eureka					
1977	274	0.38	44	0.44	6.23
1980	423	0.55	142	0.51	2.98
1983	498	0.38	111	0.26	4.49
1986	316	0.27	179	0.16	1.77
1989	473	0.31	164	0.33	2.88
1992	148	0.33	103	0.22	1.44
1995	182	0.25	117	0.23	1.56
1998	219	0.37	127	0.28	1.72
2001	642	0.16	545	0.13	1.18
Monterey					
1977	1,800	0.37	459	0.25	3.92
1980	714	0.32	287	0.24	2.49
1983	1,469	0.42	567	0.23	2.59
1986	611	0.29	382	0.16	1.60
1989	2,107	0.24	1,204	0.24	1.75
1992	484	0.30	654	0.22	0.74
1995	710	0.35	652	0.24	1.09
1998	651	0.34	567	0.37	1.15
2001	712	0.18	978	0.15	0.73
Conception					
1977	69	0.27	27	0.25	2.56
1980	THE CONCEPTION AREA WAS NOT SAMPLED DURING THE 1980, 1983, AND 1986 TRIENNIAL SURVEYS.				
1983	THE CONCEPTION AREA WAS NOT SAMPLED DURING THE 1980, 1983, AND 1986 TRIENNIAL SURVEYS.				
1986	THE CONCEPTION AREA WAS NOT SAMPLED DURING THE 1980, 1983, AND 1986 TRIENNIAL SURVEYS.				
1989	54	0.41	143	0.25	0.38
1992	27	0.43	66	0.39	0.41
1995	42	0.31	119	0.32	0.35
1998	34	0.38	46	0.35	0.74
2001	86	0.55	159	0.46	0.54
US Total					
1977	17,067	0.68	2,347	0.55	7.27
1980	11,194	0.58	2,229	0.38	5.02
1983	7,788	0.14	1,995	0.11	3.90
1986	3,742	0.11	1,302	0.09	2.87
1989	8,146	0.21	2,975	0.14	2.74
1992	4,780	0.54	2,573	0.17	1.86
1995	2,810	0.14	1,932	0.12	1.45
1998	3,925	0.25	1,824	0.16	2.15
2001	7,315	0.33	5,039	0.12	1.45

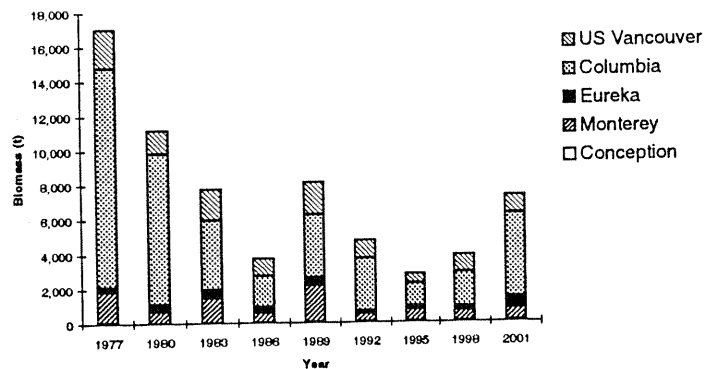


Table 1.--Estimated abundance of sablefish from the results of NMFS triennial bottom trawl surveys. These results include only U.S. waters and only the standard depth range (55-366 m) covered during all surveys since 1977.

INPFC Area	CV	Population	CV	Mean weight	
Year	Biomass (t)	(biomass)	(population)	(kg)	
US Vancouver					
1977	2,514	0.43	844	0.42	2.98
1980	2,442	0.34	1,329	0.38	1.84
1983	1,345	0.26	862	0.24	1.56
1986	2,477	0.24	2,411	0.26	1.03
1989	3,032	0.37	5,829	0.75	0.52
1992	7,383	0.69	7,568	0.69	0.98
1995	1,124	0.23	1,037	0.17	1.08
1998	3,871	0.17	2,258	0.18	1.71
2001	16,696	0.61	25,663	0.68	0.65
Columbia					
1977	7,118	0.13	4,359	0.16	1.63
1980	14,457	0.27	12,015	0.35	1.20
1983	23,375	0.39	31,363	0.44	0.75
1986	9,575	0.18	12,196	0.30	0.79
1989	13,991	0.37	15,022	0.34	0.93
1992	47,282	0.29	50,025	0.30	0.95
1995	12,504	0.29	10,777	0.23	1.16
1998	18,018	0.31	12,205	0.30	1.48
2001	50,812	0.43	96,808	0.52	0.52
Eureka					
1977	665	0.42	402	0.35	1.65
1980	8,672	0.93	15,834	0.96	0.55
1983	2,402	0.28	2,905	0.35	0.83
1986	4,530	0.44	4,349	0.34	1.04
1989	3,829	0.60	4,074	0.57	0.94
1992	1,174	0.39	1,164	0.34	1.01
1995	1,522	0.17	1,787	0.19	0.85
1998	1,545	0.36	1,193	0.36	1.30
2001	1,674	0.16	1,783	0.18	0.94
Monterey					
1977	1,305	0.20	1,444	0.24	0.90
1980	16,180	0.77	20,927	0.81	0.77
1983	3,439	0.47	2,973	0.41	1.16
1986	9,672	0.48	9,251	0.36	1.05
1989	16,407	0.85	26,470	0.89	0.62
1992	1,127	0.18	2,053	0.20	0.55
1995	1,624	0.18	2,580	0.19	0.63
1998	768	0.18	700	0.15	1.10
2001	27,958	0.57	39,915	0.61	0.70
Conception					
1977	672	0.14	492	0.14	1.37
1980	THE CONCEPTION AREA WAS NOT SAMPLED DURING THE 1980, 1983, AND 1986 TRIENNIAL SURVEYS.				
1983	THE CONCEPTION AREA WAS NOT SAMPLED DURING THE 1980, 1983, AND 1986 TRIENNIAL SURVEYS.				
1986	THE CONCEPTION AREA WAS NOT SAMPLED DURING THE 1980, 1983, AND 1986 TRIENNIAL SURVEYS.				
1989	479	0.29	847	0.26	0.57
1992	76	0.58	176	0.52	0.43
1995	795	0.24	1,320	0.20	0.60
1998	44	0.49	119	0.52	0.37
2001	2,667	0.20	4,592	0.22	0.58
US Total					
1977	12,275	0.11	7,541	0.11	1.63
1980	41,750	0.37	50,106	0.46	0.83
1983	30,561	0.31	38,103	0.37	0.80
1986	26,254	0.26	28,206	0.22	0.93
1989	37,738	0.40	52,241	0.47	0.72
1992	57,043	0.26	60,987	0.26	0.94
1995	17,568	0.21	17,501	0.15	1.00
1998	24,247	0.24	16,474	0.23	1.47
2001	99,806	0.29	168,761	0.35	0.59

