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**Data on the Commerical Sport Fishery for Summer Flounder, *Paralichthys dentatus*, in Virginia; Based on Information Collected in a Survey of Approx. 65% of the Boat Captains Operaing in 1978**

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DATA ON THE COMMERCIAL SPORT FISHERY FOR SUMMER FLOUNDER,  
PARALICHTHYS DENTATUS, IN VIRGINIA; BASED ON INFORMATION  
COLLECTED IN A SURVEY OF APPROX. 65% OF THE BOAT  
CAPTAINS OPERATING IN 1978

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DATA ON THE COMMERCIAL SPORT FISHERY FOR SUMMER FLOUNDER, PARALICHTHYS DENTATUS, IN VIRGINIA; BASED ON INFORMATION COLLECTED IN A SURVEY OF APPROX. 65% OF THE BOAT CAPTAINS OPERATING IN 1978.

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DIVISION OF FISHERIES  
SQUID & SERVICES

## Commercial Sport Fishery - the Charter and Head Boat\* fishery

### A. Temporal and Spatial Setting

#### 1. Eastern Shore

Cape Charles- 100% of the Charter Boats (n=3) here permanently report fishing for flounder on bottom-fishing trips from late May through July and occasionally to Sept. in the lower Chesapeake Bay

Quinby and Oyster- 60% of the Charter Boats (n=5) report flounder fishing from May to Sept., 40% occasionally from late May to mid-July. Flounder fishing takes place behind the barrier islands in channels and inlets.

Wachapreague- probably 100% of the Charter Boats (n=21, 1978; n=24, 1979) fish for flounder from Apr. or May through early Sept. in channels and creeks behind the barrier islands.

Chincoteague- approx. 1/3 of the 9-10 boats take flounder trips in May and June. (\* despite the availability of flounder for Charter or Head Boats, private angler flounder fishing from small boats, often rented skiffs, is predominant here)

#### 2. Norfolk, Virginia Beach area

Willoughby- of the seven Head Boats operating from Harrison's pier, approx. 1/3 report catching flounder from May through Sept. on bottom-fishing trips, 2/3 report catches of flounder only in Aug. and Sept. on bottom-fishing trips. The area fished is the lower Chesapeake Bay off Hampton, Buckroe, and Ocean View.

Little Creek- probably 100% of the Charter Boats (n=4, 1978; n=6, 1979) catch flounder on bottom-fishing trips in the lower Chesapeake Bay, often in the vicinity of the Ch. Bay Bridge-Tunnel, from June through Sept.

Lynnhaven- approx. 85% of the Head Boats (n=9, 1978; n=11, 1979) catch flounder on bottom-fishing trips in the vicinity of the Ch. Bay Bridge-Tunnel from June to Sept. None of the Charter captains interviewed (3; n=4, 1978; n=6, 1979) reported fishing for flounder.

Rudee Inlet- 6.7% of the Charter Boats (n=15) reported taking a few bottom-fishing trips to the Ch. Bay Bridge-Tunnel from June to Aug. to fish for sea bass and flounder. Head Boats (n=2) do not direct any effort towards flounder fishing.

#### 3. Lower Peninsula

Hampton and Poquoson- 100% of the Head Boats (n=2) catch flounder on bottom-fishing trips from late May through Sept. in the lower Ch. Bay. 50% of the Charter Boats (n=4) fish for flounder occasionally from May to Sept., 25% only in Apr. and May.

\* Charter Boat- hired for a set price, carries 6 passengers or less.  
Head Boat- carries more than 6 fishermen, fees on a per person basis.

3. Lower peninsula (con't.)

York River- the one head boat operating reports catches of flounder from May to Oct. while bottom-fishing in the York R. and at York Spit.

4. Northern Neck

Deltaville and Locklies Creek- no reports of flounder catches from Head or Charter Boats.

Potomac River ports- 84% of the Charter Boats (n=31) report no flounder catches, 11% report catching them only rarely on bottom-fishing trips, or bluefish trips from May to Oct., and 5% report occasional directed effort from Apr. to Oct. in Bay waters near the Eastern Shore.

B. Trends in Recreational Catch

Historical- C.E. Richards (1965) found that the summer flounder became the most important bottom-fish available to Charter Boat fishermen during 1958 on the Eastern Shore. 1959 saw an abrupt rise in catch rates; catches were highest in July, with May, June, and Aug. catches at about the same level (see attached copies of Richard's data). On flounder recreational fishing in the Chesapeake Bay region, Richard's (1962) found flounder ranked fourth in catch rates by area, by month, and by year, of private and Charter bottom-fishing anglers. Catch rates were highest in Apr., May, and early June, and in higher salinity areas, such as the James R. and off Ocean View. 1958 had the highest catch rates followed by 1959. These catch estimates were included:

<u>YEAR</u>	<u>AVE. WT./FISH</u>	<u>TOTAL SPORT CATCH (LBS.)</u>
1955	1.17	61,500
1956	0.70	25,500
1957	0.74	48,500
1958	0.91	607,900
1959	1.44	620,100
1960	1.32	142,700

1978-

1. Eastern Shore.

Cape Charles- not abundant in catch; no estimate of numbers/weight

Quinby & Oyster- for 60% of the boats, ave. catch/trip = 68 fish (flounder) or approx. 137 lbs., most abundant fish on these trips. Others land 50-100 lbs./trip. Catch rate on a flounder trip is 13.6 flounder/person. Estimated total catch for the season is approx. 18,000 lbs. Captains claim that in the past few years the flounder caught have gotten progressively smaller.

Wachapreague- ave. catch/trip = 52.4 fish or 78.6 lbs. Catch rate equals 10.5 fish/person/trip. Estimated total catch for the season is approx. 90,700 lbs. The flounder is the most abundant fish in their catch; captains report that flounder fishing has always been fairly stable, but in the last few years the average size of the fish has declined. (Wachapreague is often referred to as the "flounder capital").

Chincoteague- no catch estimates; reported as not abundant in the catch.

2. Norfolk, Va. Beach

Willoughby- no catch estimates; captains reported flounder as either not abundant in catch, or as last in order of abundance behind spot, croaker, and grey trout in the bottom-fishing catch.

Little Creek- no catch estimates; reported as not abundant in bottom-fishing catch. One comment- "Flounder fishing has been fluctuating by year . . . in 1978, 3/4 to 1 1/4 pounders were predominant, while big ones, 8 lbs.+, were scarce."

Lynnhaven- no catch estimates; majority of Headboats did not rank the flounder as an abundant fish in their catch on bottom-fishing trips. One comment was that "flounder have gone downhill in the last five yrs." while another was that "flounder fishing had been good in the past 7-8 yrs."

Rudee Inlet- no data given on catch

3. Lower Peninsula

Hampton and Poquoson- no catch estimates; one Charter Boat reported it second in abundance in its catch behind bluefish and said that "floundering had been good in past 2-3 yrs." Two Head Boats ranked it fourth or fifth in bottom-fishing catch.

York R.- Fourth most abundant fish in the Head Boat catch behind spot, croaker, and grey trout; no catch estimates.

4. Northern Neck

Deltaville & Locklies- flounder not part of catch

Potomac R.- from 1979 daily catch logs received from approx. 40% of the boats, no. of flounder caught is extremely insignificant.

C. Demography of Participants

1. Eastern Shore

Cape Charles- approx. 500 anglers take bottom-fishing trips on these boats per season and have the potential for landing flounder. 22% are in-state customers and 78% are out-of-state.

Quinby & Oyster- approx. 615 anglers fish for flounder per season; 30% are in-state, 70% are out-of-state.

Wachapreague- approx. 5670 flounder fishermen per season; 39% in-state, 61% out-of-state.

Chincoteague- no data available

2. Norfolk, Va. Beach

Willoughby- approx. 15,243 anglers bottom-fish from these Head Boats per season and have the potential for landing flounder; 68% are local, 30% are in-state, 3% out-of-state.

Little Creek- no data available

Lynnhaven- approx. 19,000 anglers bottom-fish from these Head Boats per season, and have the potential for landing flounder; 17.3% are local, 53.5% in-state, 29.2% out-of-state

Rudee Inlet- no data

### 3. Lower Peninsula

Hampton & Pogooson- approx. 2304 bottom-fishermen per season who may land flounder; 33.5% local, 51.5% in-state, 15% out-of-state.

York R.- approx. 1215 bottom-fishermen that have the potential for landing flounder; 10% are local, 90% in-state.

### 4. Northern Neck - not applicable

#### D. Modes of fishing

The predominant method of sport fishing for flounder from Charter and Head Boats involves drifting with the tide and using natural baits, such as squid, minnows, bloodworms, and occasionally cut-bait or peeler crabs. Light tackle is used with a bottom-fishing rig (2 hooks and a sinker).

#### E. Disposition of catch

Generally, consumption by the angler, (no sales by the captain)

#### F. Economic Impact

Only information available at this time is the gross revenues to the Charter and Head Boat businesses from fees paid for flounder fishing trips.

Quinby & Oyster- \$17,500 in gross revenue

Wachapreague- \$160,000 in gross revenue

#### G. Economic and Political Importance of Organizations

No data available, except that a Wachapreague Guides Association does exist to which probably 100% of the Charter captains belong.

#### \* Personal Comments

It appears that the ocean-side Eastern Shore is the only area in Va. where summer flounder is actively sought and successfully landed by Charter and Head Boats. The private angler effort for flounder is also extensive on the Eastern Shore, especially in Chincoteague and Wachapreague. The flounder is perhaps too elusive a catch for Chesapeake Bay area captains to try to satisfy their customers with; also flounder fishermen may not be attracted to these boats due to the customary types of fishing trips. Whereas, at this point, the summer flounder is only an incidental part of the fish catch of Charter and Head Boats in the Bay, the Wachapreague fleet is totally devoted to it; a decline in flounder there would directly produce a decline in business.

#### REFERENCES

Richards, C.E. 1962. A Survey of Salt-Water Sport Fishing in Virginia, 1955-1960. Chesapeake Science, Vol.3, No.4, pp. 223-235.

----- 1965. Availability Patterns of Marine Fishes Caught by Charter Boats Operating off Virginia's Eastern Shore, 1955-1962. Chesapeake Science, Vol.6, No. 2, pp. 96-108.

From:  
Richards. 1965

Species	Catch rate by month							
	April	May	June	July	Aug.	Sept.	Oct.	
Black sea bass	---	1.57	1.65	1.57	4.04	1.37	0.81	
Bluefish	---	0.43	1.33	0.88	0.52	1.07	0.57	
Cobia	---	0.03	0.06	0.08	0.06	0.08	0.22	
Dolphin	---	---	0.06	0.13	0.41	0.52	---	
Weakfish	---	1.01	0.78	0.48	0.84	1.99	9.21	
Kingfish	---	0.13	0.24	0.37	0.20	0.21	0.09	
Atlantic croaker	---	0.28	0.77	0.81	3.33	1.22	0.24	
Black drum	0.07	0.11	0.10	0.04	---	0.17	---	
Red drum	0.12	0.06	0.08	0.05	0.04	0.08	0.05	
Little tuna	---	---	---	---	0.27	0.36	0.16	
Atlantic bonito	---	0.03	0.89	0.22	1.03	2.45	0.35	
Bluefin tuna	---	---	0.19	0.13	---	---	---	
White marlin	---	---	---	0.05	0.07	0.07	---	
* Summer flounder	0.20	1.07	1.07	1.17	1.02	0.54	0.10	

Species	Catch rate by year							1962
	1955	1956	1957	1958	1959	1960	1961	
Black sea bass	5.94	2.59	1.94	1.28	2.09	1.67	1.98	2.46
Bluefish	2.06	1.29	0.98	0.42	1.18	0.45	1.13	0.48
Cobia	0.13	0.07	0.06	0.07	0.07	0.05	0.10	0.09
Dolphin	0.07	0.36	0.35	0.29	0.22	0.50	0.40	0.48
Weakfish	3.13	1.28	1.93	0.18	0.98	1.38	0.61	2.43
Kingfish	0.25	0.48	0.25	0.09	0.11	0.18	0.16	0.37
Atlantic croaker	1.37	2.48	1.09	1.41	0.14	0.05	0.12	0.56
Black drum	0.06	0.13	0.11	0.12	0.03	0.10	0.16	0.14
Red drum	0.09	0.05	0.14	0.06	0.02	0.04	0.07	0.13
Little tuna	0.35	0.19	0.07	0.15	0.49	0.33	0.17	0.11
Atlantic bonito	0.08	0.50	0.05	2.38	0.69	0.54	0.40	1.10
Bluefin tuna	---	---	---	---	0.28	0.09	0.10	---
White marlin	0.04	0.08	0.05	0.10	0.03	0.04	0.03	0.07
* Summer flounder	0.40	0.53	0.85	0.85	1.49	0.99	1.11	1.09

Table 2. (cont.) No. of fish caught and effort... From charter boats operating off Va's Eastern shore

		Summer flounder							TOTAL
		Apr	MAY	JUNE	JULY	AUG	SEPT	OCT.	
1955	Man-hours			46	192	78			316
	Catch			14	89	22			125
1956	Man-hours	178	402	1,106	597	503			2,786
	Catch	20	249	728	232	256			1,485
1957	Man-hours	458	565	819	710	38			2,590
	Catch	144	566	847	613	22			2,192
1958	Man-hours	541	840	880	589	318	20		3,188
	Catch	268	689	1,056	594	107	2		2,716
1959	Man-hours	1,112	1,587	1,294	700	341			5,034
	Catch	1,693	2,718	1,919	1,033	141			7,504
1960	Man-hours	1,105	982	456	311	269	60		3,183
	Catch	865	1,024	749	393	106	11		3,148
1961	Man-hours	1,248	1,379	1,488	1,185	460	66		5,826
	Catch	1,557	1,190	1,965	1,248	493	2		6,455
1962	Man-hours	30	800	1,070	1,258	936	258	-12	4,364
	Catch	6	1,302	895	1,390	1,094	52	1	4,740
<b>Total</b>	Man-hours	30	5,442	6,871	7,493	5,106	2,187	158	27,287
	Catch	6	5,849	7,345	8,743	5,229	1,177	16	28,365