

44 YEARS OF TOURNAMENT DATA:

A glimpse into Hawaii's recreational fishery

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Recreational Fishery Data

- No state mandated catch reporting
- NMFS Marine Recreational Fisheries Statistical Survey (MRFSS) 1979-1982 (unpublished) and 2001-present



Recreational Fisheries Metadata Project Objectives

- Document and compile sources of pelagic recreational fishing data in Hawaii over the past 50 years
- Create a recreational fishery database
- Analyze data for trends in catch and effort





pacific islands fisheries science center
Fisheries Monitoring Economics Program



Go to....

Recreation Meta Data Go

Thursday, December 11, 2003

Recreational Meta Data Fishing Project

LITERATURE

DATA SUMMARIES

CONTACTS

HAWAII PELAGIC RECREATIONAL DATA LITERATURE

YEAR	AUTHOR	TITLE	TABLES
2002	Seki, M.; Lumpkin, R.; Flament, P.	Hawaii cyclonic eddies and blue marlin catches:the case study of the 1995 Hawaii International Billfish Tournament	
2002	USFWS	2001 National survey of fishing, hunting and wildlife-associated recreation (Outside link)	
2001	McConnell, K.E.; Haab, T.C.	Small boat fishing in Hawaii:choice and economic values	Tables
2001	Miller, M.; et. al.	Proceedings of the 1998 Pacific Island Gamefish Tournament Symposium (Outside link)	
2001	O'Malley, J.; Glazier, E.	Motivations, satisfaction and expenditures of recreational pelagic charter fishing patrons in Hawaii	Tables
2000	Williams, P.; Whitelaw, A.	Preliminary estimates of annual catches for billfish species taken in commercial and recreational fisheries of the	



Tournaments

CLUB SPONSORED

- Entry fees under \$1k
- Jungle rules
- Target all flagfish
- Local participation
- 6-260 boats

PROFESSIONALLY RUN

- Entry fees over \$1k
- IGFA rules
- Target marlin and ahi
- Participants mostly from mainland
- 6-50 boats



Tournaments Records

- Club sponsored

 - Revolving members/officers

 - Unofficial storage of records

 - Disinclined to provide data that may “hurt” recreational fishermen

- Professionally run

 - No time for looking through archives

 - Weary of providing data

 - Disinclined to provide data that may “hurt” recreational fishermen AND their business



Tournament	Type	Entry Fee	Rules	Participants	Island	Years data	Boats
Rolex	Professional	\$4,800	IGFA	Mainland	Hawaii	2/4	40
HIBT	Professional	\$3,800	IGFA	International	Hawaii	42/42	20-80
WBC Heavy Tackle	Professional	\$3,000	IGFA	Mainland	Hawaii	3/4	10
Maui Jim Championship	Professional	\$3,000	IGFA	Mainland	Hawaii	1/4	6
Skins Marlin Derby	Professional	\$3,000	IGFA	Mainland	Hawaii	3/12	20
HIBT ProAm	Professional	\$2,800	IGFA	International	Hawaii	5/26	20

TOURNAMENT RECORDS OBTAINED

WBC KoOlina	Professional	\$900	IGFA	Mainland	Oahu	2/4	10
WBC Light Tackle	Professional	\$900	IGFA	Mainland	Hawaii	3/4	10
WBC Shootout	Professional	\$800	IGFA	Mainland	Hawaii	2/4	10
Kona Classic	Professional	\$350	Jungle	Mixture	Hawaii	3/6	40
Huggo's Wahine	Professional	\$350	Jungle	Mixture	Hawaii	7/8	80
Lahaina Jackpot	Club	\$750	IGFA	Mixture	Maui	9/27	40-160
Lahaina Wahine	Club	\$350	IGFA	Local	Maui	6/27	40
Keehi Pure Jackpot	Club	\$350	Jungle	Local	Oahu	1	35
Ho'olea	Club	\$350	Jungle	Local	Oahu	5/17	60
Senorita's	Club	\$350	Jungle	Local	Oahu	20	35
Ahi Fever	Club	\$325	Jungle	Local	Hawaii	6/6	200+
Hilo Trollers Labor Day	Club	\$80	Jungle	Local	Hawaii	6	40
Hilo Trollers Wahine	Club	\$40	Jungle	Local	Hawaii	6	20
Hilo Trollers Monthly	Club	\$40	Jungle	Local	Hawaii	1	20
Hawaii Yacht Club	Club	\$15	Jungle	Local	Oahu	1-7	10
Port Allen	Club		Jungle	Local	Kauai	3	40
Rainbow	Club		Jungle	Local	Kauai	2	30
Kikiaola	Club		Jungle	Local	Kauai	2	20





27th ANNUAL
Lahaina
Jackpot
fishing tournament
Maui, Hawaii

2003 JAC
EVENTS FOR
Lahaina
DATE 7/10
MAREL
55'
VESSEL C. Holt
BOAT Honeys
CAPT B Holt





The Database

- Compilation of catch and effort data from weigh-in slips, radio log-ins and tournament summaries for each event
- Organized by fish caught
- Each tournament has own reporting procedures, affected by tradition, rules and awards



Data Inconsistencies

- Many records incomplete
- Nomenclature
- Estimation of weight
- Weighing fish in aggregate
- Not all fish caught are weighed



ID	Tournament	Date	Year	Month	Total # boats	Species	Quantity	Release
11907	Labor Day		1996	Sept	18		0	No
11908	Labor Day		1996	Sept	18	Marlin	1	No
11909	Labor Day		1996	Sept	18		1	No
11910		22-Jul-90	1990	July	5	Barracuda	1	No
11911		22-Jul-90	1990	July	5	Mahimahi	1	No
11912		22-Jul-90	1990	July	5	Ono	1	No

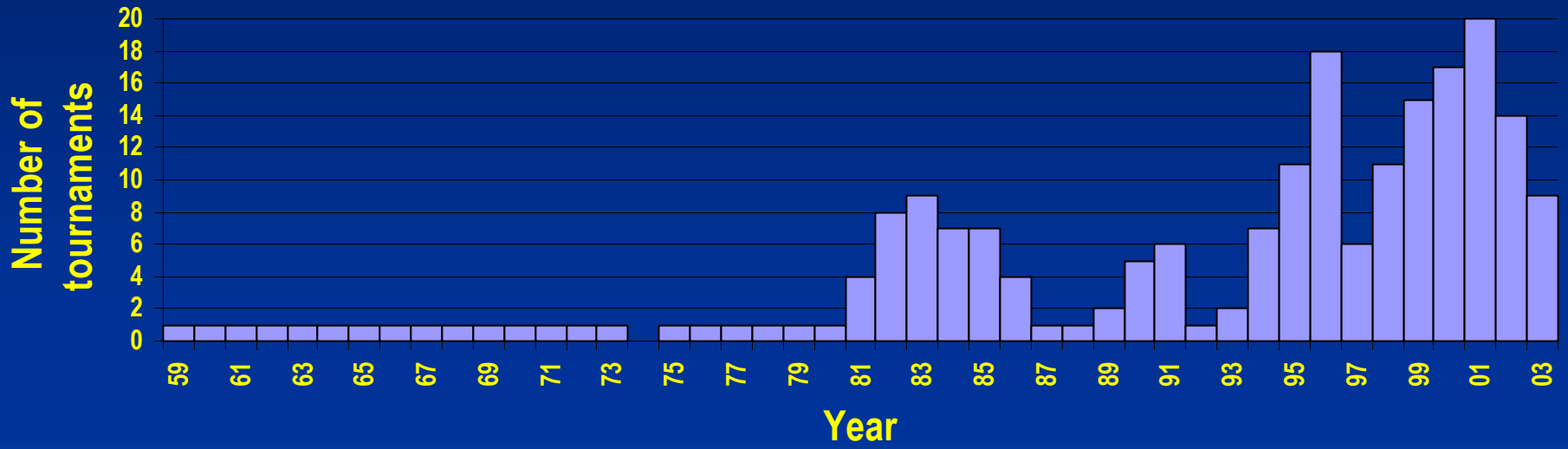
Weight	Est Weight	Area	Island	Location	Line	Bait type	Time hooked	Time on board	Time fought
		K	Big Island	Hilo			13:37	13:38	1
	200	L	Big Island	Hilo			13:41		
		D	Big Island	Hilo			14:17		
7			Oahu	Leeward					
15			Oahu	Leeward					
26			Oahu	Leeward					

Database Summary-Effort

- 35 distinct tournaments since 1959 for a total of 204 events
- 8,075 boats participating in 465 days
- 23,583 trips total



Tournaments per year in database



Database Summaries-Catch

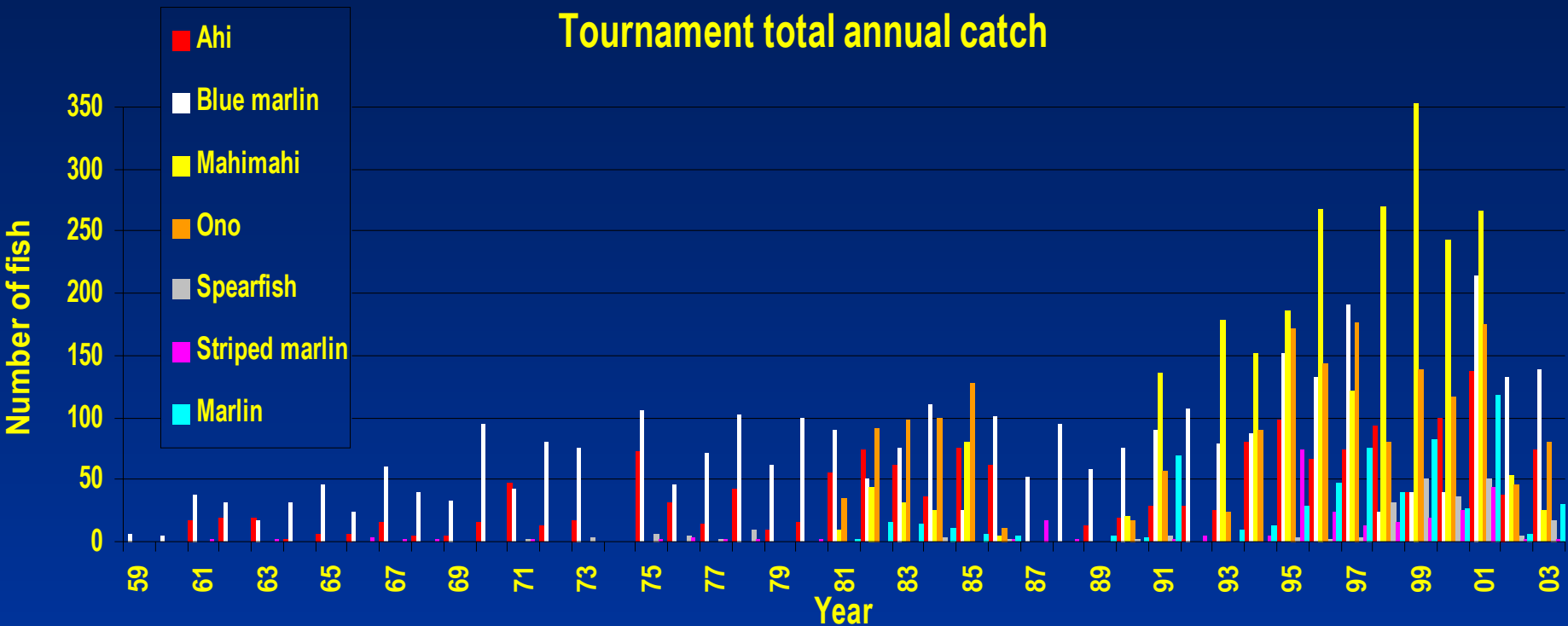
- 11,667 entries, including lost fish and compiled catches
- 11,286 individual fish totaling 829,535 lbs.
- 10,283 flagfish:
 - blue marlin (3271)
 - striped marlin (266)
 - “marlin” (606)
 - shortbill spearfish (233)
 - ahi (1649)
 - mahimahi (2480)
 - ono (1778)



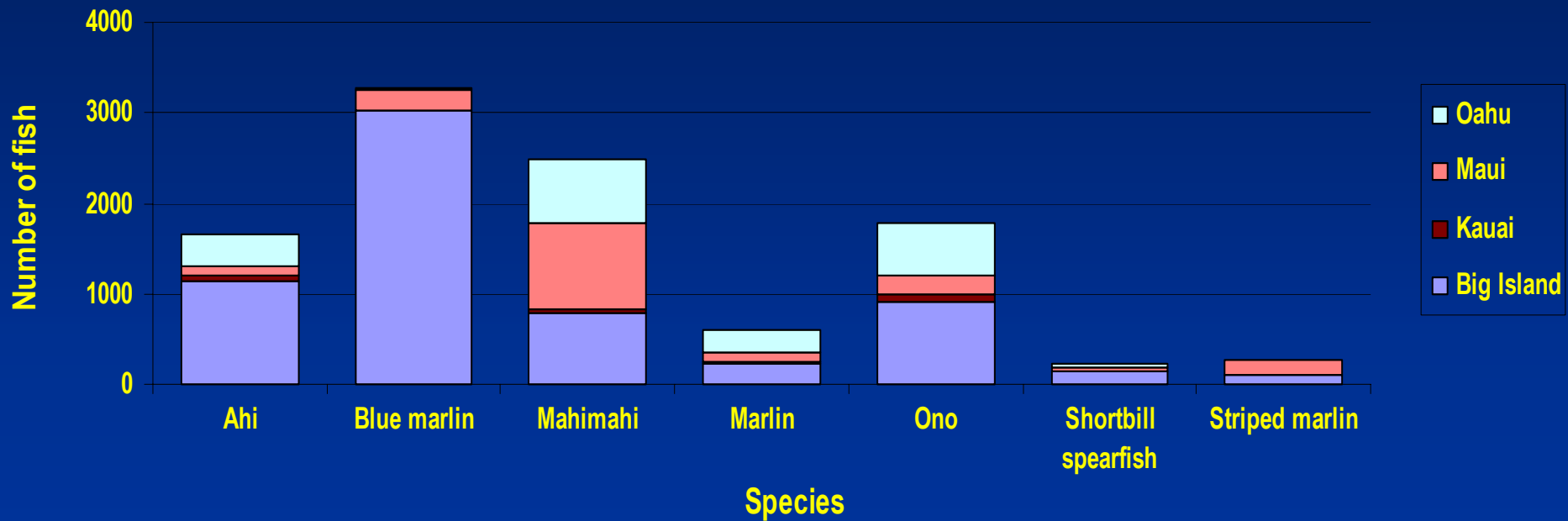
Tournament annual catch per unit effort (CPUE) for flagfish



Tournament total annual catch



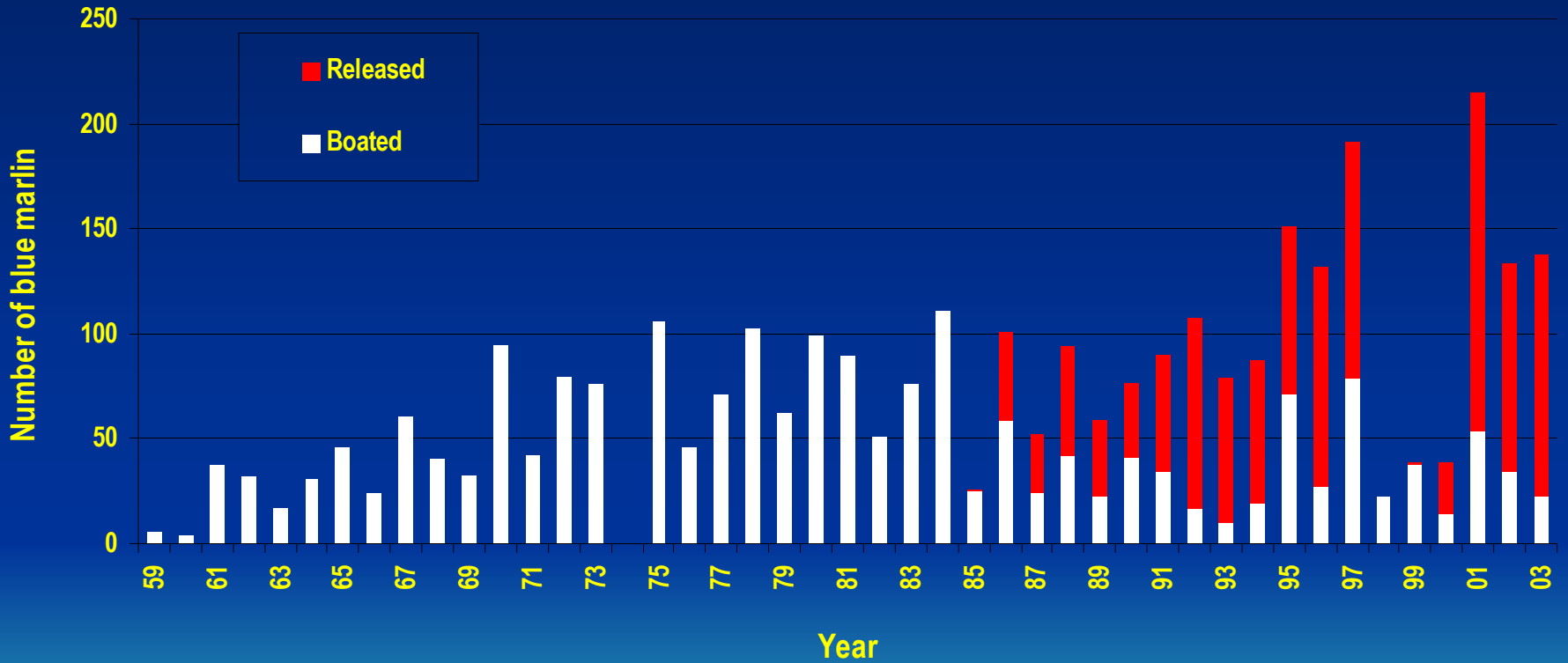
Tournament catch by species and island



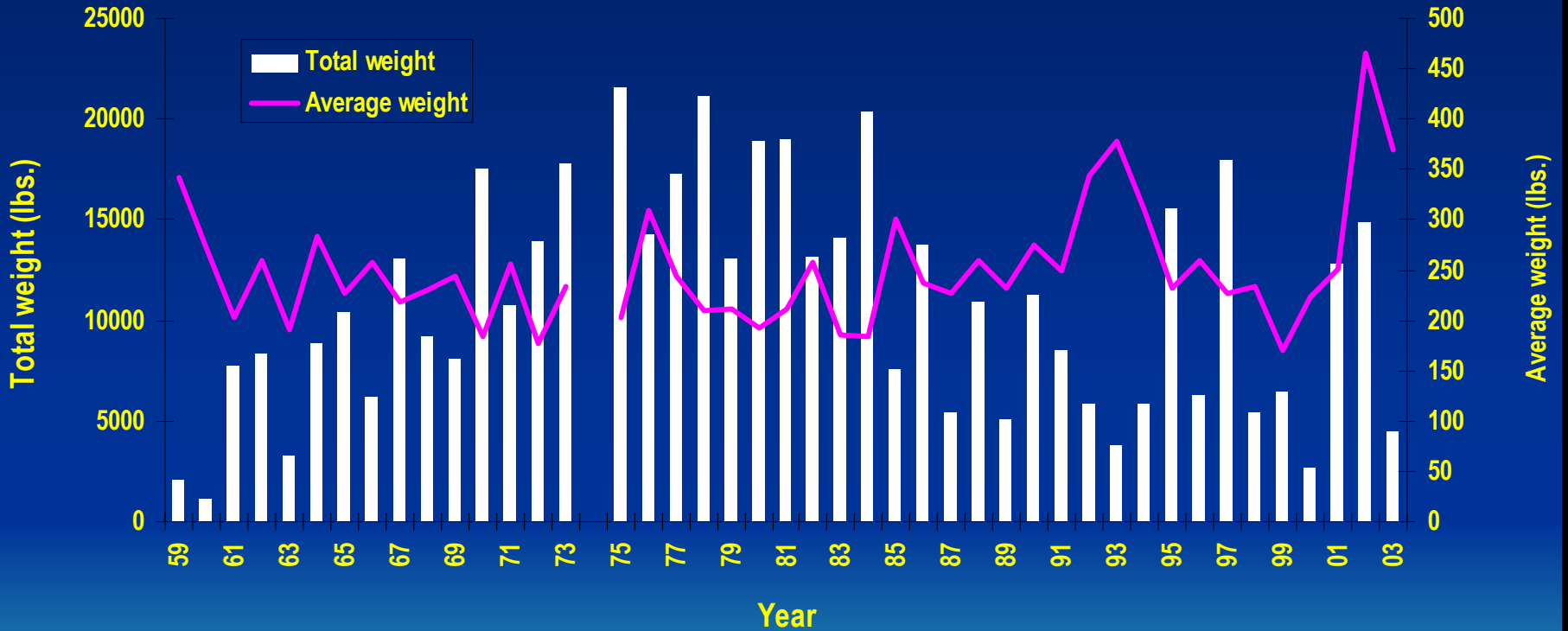
	# fish weighed	Sum (lbs.)	Ave (lbs.)	Min (lbs.)	Max (lbs.)
Ahi	1186	155,564	131	1	261
Blue marlin					1259
Mahimahi					75
Ono					58
Striped marlin	102	12,800	125	55	165
Spearfish	107	3462	32	7	52
Marlin	368	48,848	133	4	739

**TOURNAMENT
 FLAGFISH
 WEIGH-IN
 SUMMARY**

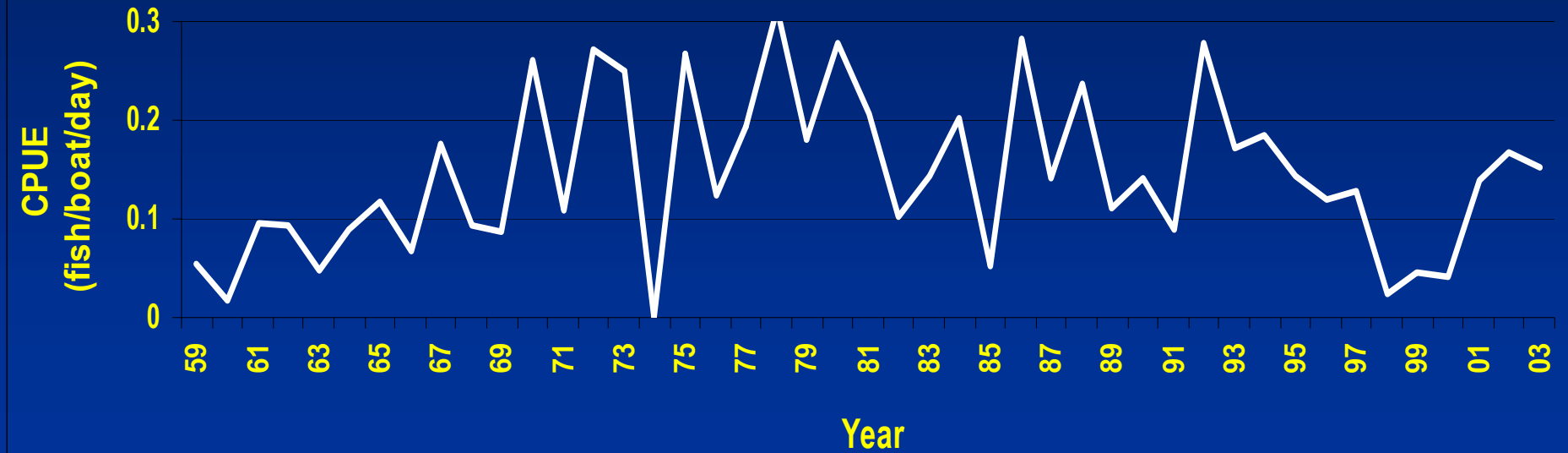
Tournament total annual blue marlin catch



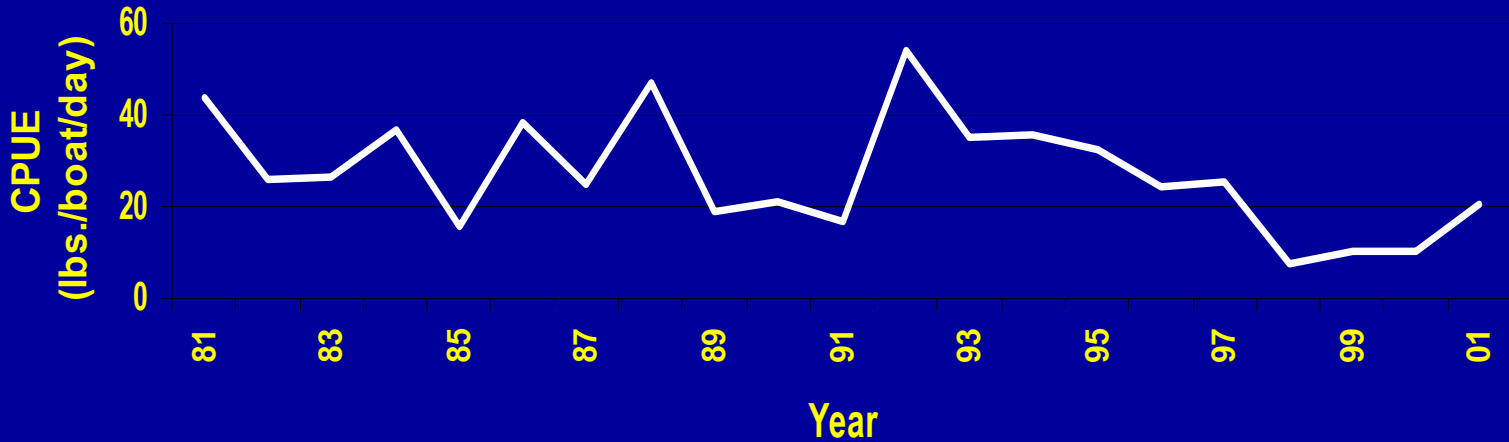
Tournament total and average annual blue marlin weight



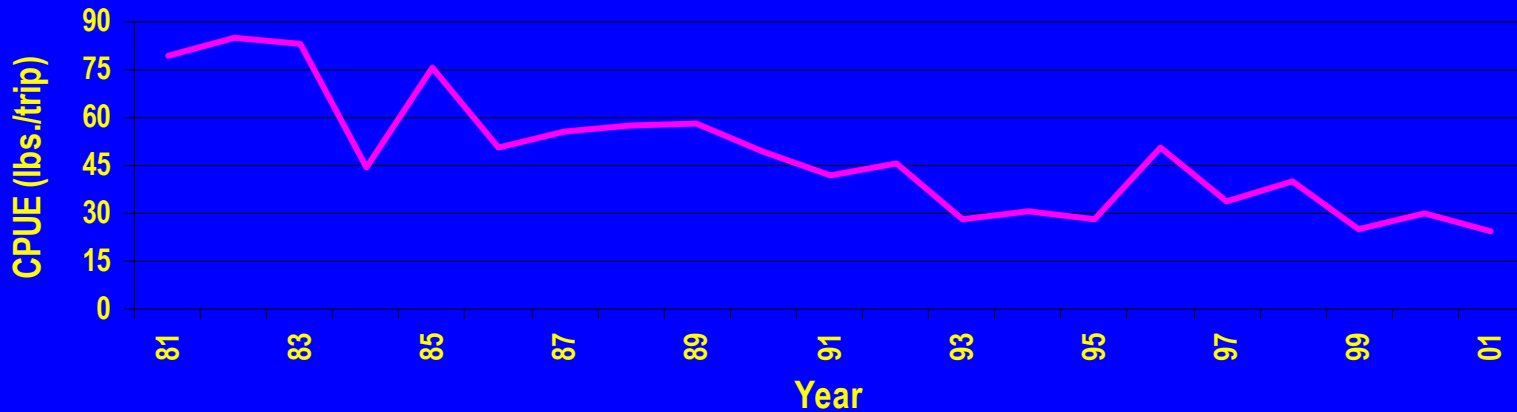
Tournament annual catch per unit effort (CPUE) for blue marlin



Tournament annual catch per unit effort (CPUE) by total weight (boated and released) for blue marlin



Hawaii CHARTER commercial trolling annual catch per unit effort (CPUE) by total weight for blue marlin



Conclusions

- Tournament records provide archival recreational catch and effort data.
- However, inconsistencies in reporting and collection limit the use of this data.
- And tournament fishing is not necessarily representative of recreational fishing in general.



Summary

- www.swfc2.nmfs.gov/fmpi/fmep/recreation
- Future tournament data collection could be continued by harbor masters and harbor businesses
- JIMAR report: Pelagic fishing tournaments, clubs and organizations throughout the State of Hawaii
- JIMAR report: Recreational fishing metadata
- Peer-reviewed article: FAD usage in Hawaiian tournaments
- New study: Social and economic survey of tournament participants (Minling Pan)



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