

TIMELINESS OF REPORTING IN THE SELF-REPORTING
COMMERCIAL LANDINGS SYSTEM IN TEXAS

by

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ABSTRACT

A self-reporting system of saltwater landings in Texas has been in effect since 1935. Compliance with the law was determined by measuring the percent of reports submitted on time from 1979-1986. Overall compliance averaged 92% annually. Percentage of dealers failing to meet reporting requirements at least once in each year ranged from 21-64%. Among dealers who submitted late reports, most failed to comply once or twice per year; however, any failure to report can compromise the integrity of the data.

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INTRODUCTION

The accuracy of commercial landings data is important for effective fisheries management (Gulland 1977) but is seldom considered by fisheries managers when making management decisions (Cushing 1970). Harvest by commercial fishermen is usually determined through voluntary or mandatory self-reporting systems, however the accuracy of self-reported data is difficult to verify and dealers have admitted in court that they do not accurately report landings (Matlock 1982). Different types of reporting requirements can also affect the amount of non-reporting and bias estimates of abundance based on self-reported commercial landings (Green and Thompson 1981).

Texas commercial landings have been collected via a self-reporting system since 1935 when the legislature enacted Article 978f-1 of the Texas Penal Code. The Texas Parks and Wildlife Department (TPWD) was directed to "gather statistical information on the harvest of fish, shrimp, oysters, and other forms of edible marine products" (State of Texas 1987). Included among the provisions of this act is the requirement that the TPWD prepare and distribute forms necessary to collect information concerning the numbers and weight of each species taken, gear used, and body of water from which each species is taken. Any dealer purchasing edible marine products directly from any person other than another dealer is required to file a Monthly Marine Products Report (MMPR) with the TPWD by the 10th day of the month following the reporting month. Each MMPR is checked for completeness by the statistical agent. Incomplete MMPR's are referred back to the dealer. Dealers failing to submit an MMPR on or before the due date are contacted by TPWD to obtain the report or to initiate legal action against violators. Prior to September 1985, dealers were required to file a MMPR only if purchases were made. Thereafter, all dealers were required to submit an MMPR, including reports that no purchases were made in the previous month.

The accuracy of MMPR data and the timeliness with which reports are submitted are issues relevant to the efficacy of self reporting systems, especially in relation to the use of quotas. Moreover, the degree of non-compliance with the law, as illustrated by failure to submit MMPR's on time has been used by the Texas legislature as one of the criteria for determining whether to permit or prohibit commercial landings of finfish (State of Texas 1987). The purpose of this study is to estimate dealer compliance with deadlines for submitting the MMPR.

MATERIALS AND METHODS

A list of active seafood dealers for each calendar year (1979-1986) was generated based on annual sales of dealer licenses by the TPWD and by contacts made by the statistical agent. Seafood dealers were defined as any dealer who purchased fish, shrimp, oysters, or other forms of edible marine life directly from commercial fishermen. This list was updated annually using new licenses issued and deleting dealers that had discontinued business. The total number of reports required annually equalled the sum of the number of licensed

dealers identified each month. For this study, dealers that failed to file an MMPR and were subsequently reported to law enforcement were considered delinquent. The number of delinquent reports submitted annually by each dealer was then compiled.

The degree of compliance with the MMPR reporting requirement was determined by matching the number of reports submitted on time with the total number of reports required to be submitted. The number of delinquent dealers was compared to the number of licensed dealers to estimate the percent of dealers who failed to report for each calendar year. All dealers were then grouped according to the number of delinquent reports submitted annually (0, 1, 2, 3-5, and 6-12) and percentages for each group were calculated. Delinquent dealers only were also grouped the same as all dealers in order to calculate percentages.

For years in which appropriate law enforcement data were available (1984-1988), the number of citations issued and fines collected for failure to submit a MMPR were obtained from information provided by TPWD's law enforcement agency. For 1984, an accounting of the number of delinquent reports ultimately submitted was determined.

RESULTS

Seafood dealers do not always comply with the deadline for reporting their seafood purchases. However, most of the reports are submitted on time. Compliance with reporting deadlines in the MMPR program averaged 92% of required reports annually and compliance has generally increased since 1979 (Table 1). The percentage of dealers failing to meet the reporting due date requirement at least once per year ranged from 21-64% (Table 1, Figure 1). Most delinquent dealers submitted late reports only once or twice per year (Figure 2); even so, dealers missing 3 or more times accounted for over 43% of delinquent reports. During the interval examined in this study, the number of licensed dealers increased from 122 in 1979 to 285 in 1986, whereas the percent of delinquent dealers generally declined (Table 1).

Forty-six citations were issued by TPWD Law Enforcement personnel from 1984-1988 for failure to submit a MMPR. Of these citations, 31 convictions were made, resulting in \$2,209.50 in fines collected. Moreover, 24 (1%) of the reports due in 1984 (n=2,220) were never obtained.

DISCUSSION

Any failure to report commercial seafood landings within prescribed deadlines can compromise the integrity of the data. For example, timeliness of self-reported commercial landings data is important especially when current information is needed to make specific and prompt management decisions that affect fisheries (e.g. quotas). Quota management has not been used in Texas since 1981, partially because of incomplete reporting (Matlock, 1986).

Increasing compliance noted in this study may be attributed to strengthened regulations dealing with the requirement to report zero purchases beginning in September 1985. Prior to 1985, dealers that had been filed on for neglecting to send in reports or that did not purchase seafood products could claim no purchases had been made as an excuse for not sending in a report. The addition of the requirement that reports be filed even if no product is purchased closed a non-reporting loophole and simplified enforcement of the regulation.

Failure of dealers to submit reports in a timely manner is only one of the problems associated with a self-reporting system. A critical deficiency is that purchases by dealers are not verified even when reported in a timely fashion. The number of convictions over a recent 5-year period was low; however, each failure to submit an MMPR dictated the need for a contact by the TPWD statistical agent and an action (at least one visit) by a Law Enforcement officer. Seafood products purchased by consumers and restaurants directly from commercial fishermen are not required to be reported on MMPR's. The present reporting system does not provide estimates of fishing effort. These deficiencies limit the usefulness of commercial landings data when managing fisheries resources.

Self-reported purchases of commercial landings can be used as an indication that marine products are being harvested and may provide long term trend data. However, an on-site intercept sampling program such as described by Lahr et al. (1987) to monitor landings as they occur would improve the precision of harvest estimates and reduce the bias in these estimates. Additionally, an on-site sampling program would intercept seafood products not being reported on MMPR's, obtain estimates of fishing effort, and reduce a management agency's dependency on self-reported data when making management decisions.

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Table 1. Total number of licensed dealers, number of delinquent dealers (those failing to turn in MMPR at least once in a year), number of delinquent dealers by number of months delinquent, number of MMPR's expected, and number received on time by TPWD (1979-1986). Number in parentheses () are percents.

Year	Total licensed dealers	Delinquent dealers		No. of delinquent dealers by no. of months delinquent					No. of MMPR's expected	No. received on time
		No. (%)	No. (%)	1	2	3-5	6-12			
1979	122	78 (64)	26	28	22	2	1,464	1,290 (88)		
1980	139	67 (48)	27	15	10	1,668	1,473 (88)			
1981	180	76 (42)	19	24	11	2,160	1,936 (90)			
1982	170	81 (48)	27	14	13	2,040	1,783 (87)			
1983	222	69 (31)	22	14	12	2,664	2,436 (91)			
1984	185	38 (21)	8	7	8	2,220	2,073 (93)			
1985	284	63 (21)	20	11	7	3,408	3,221 (94)			
1986	285	79 (28)	37	19	5	3,420	3,242 (95)			

Figure 1. Percent of all dealers that submitted late reports zero times, once, twice, 3-5 times and 6-12 times annually from 1979-1986.

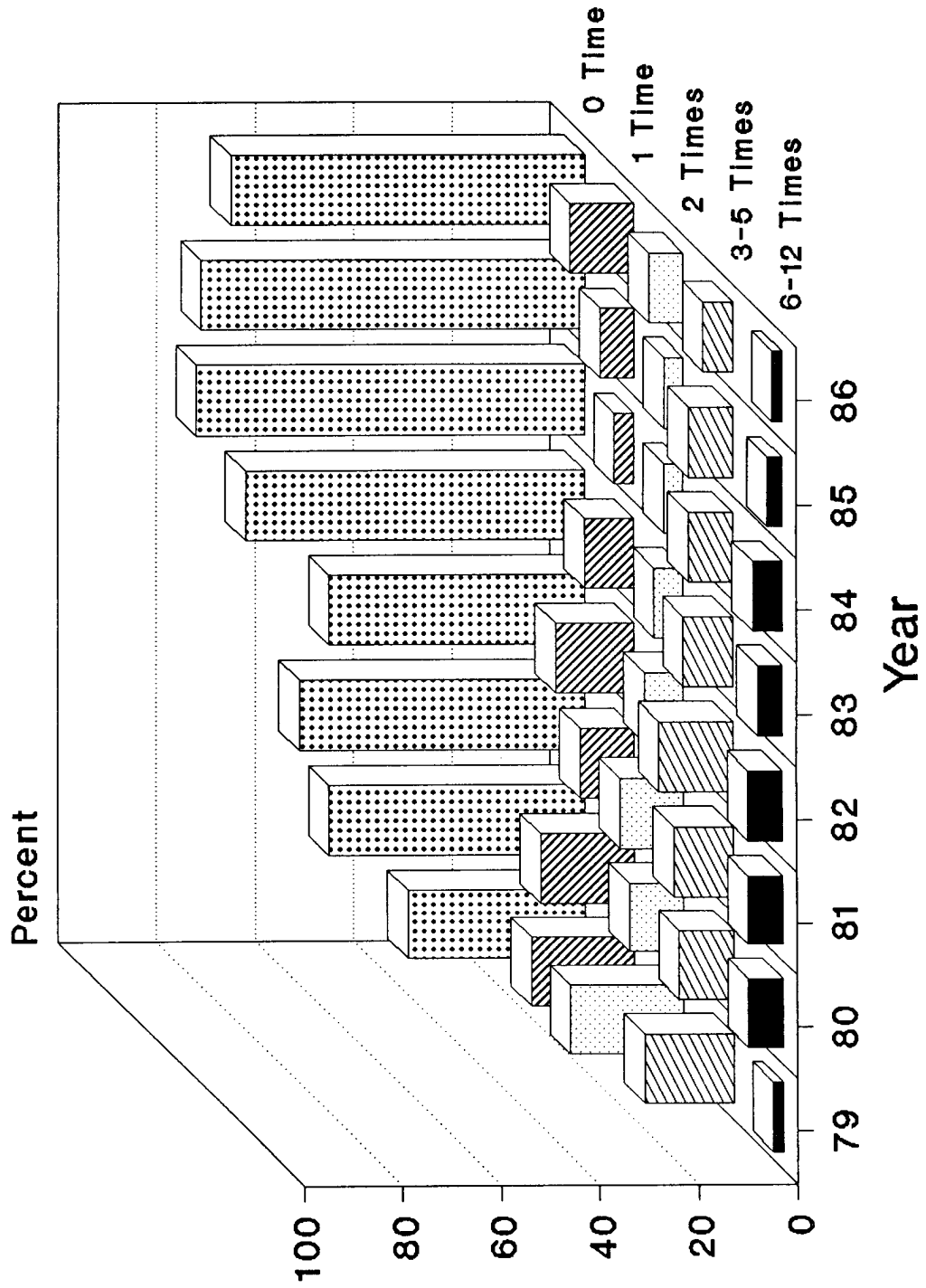
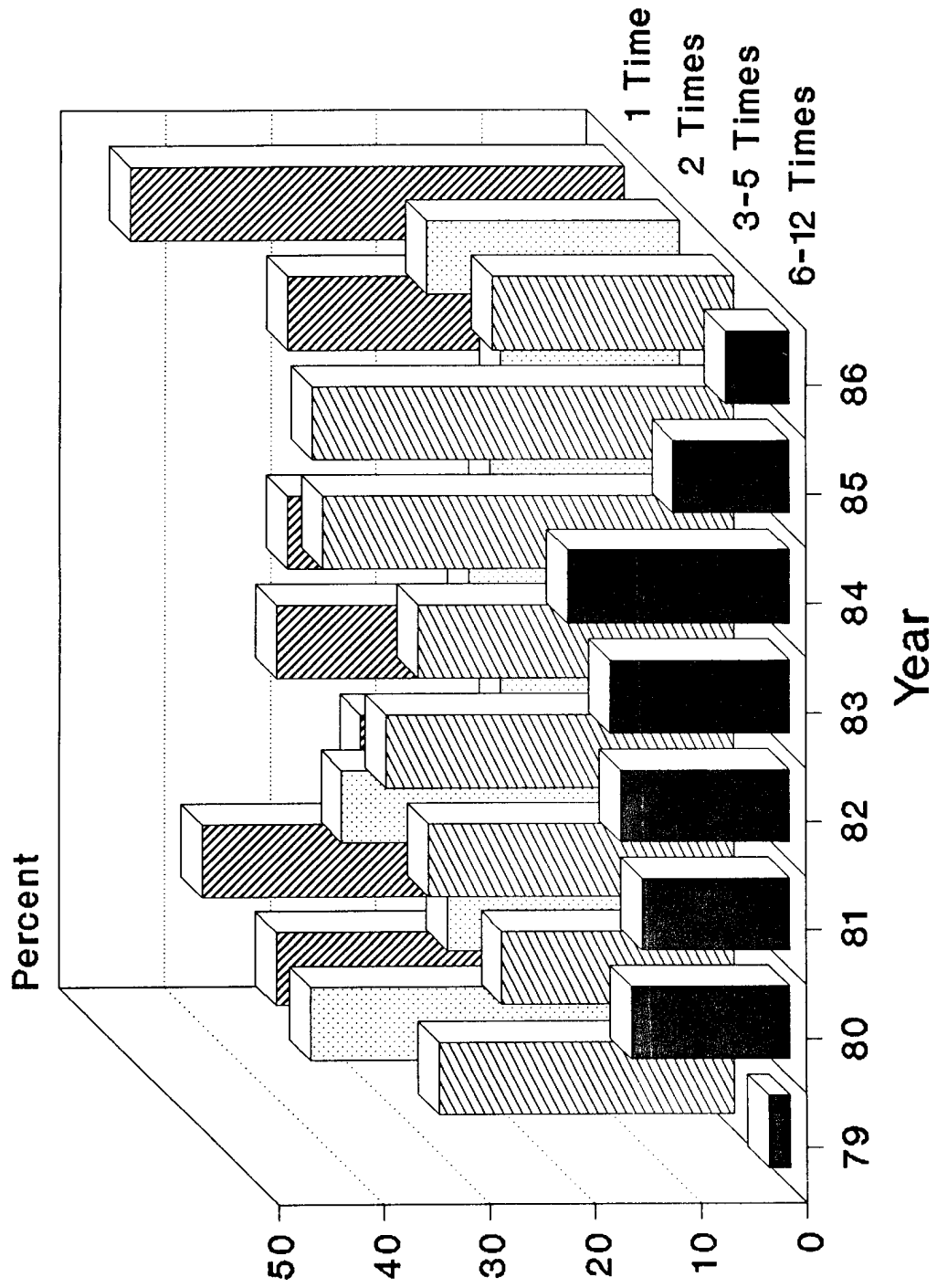


Figure 2. Percent of delinquent dealers that submitted late reports once, twice, 3-5 times, and 6-12 annually from 1979-1986.



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