MORE ABOUT OYSTERS THAN YOU WANTED TO KNOW

By GARRETT POWER*

"I am reminded of the little girl's criticism of a book her teacher had made her read about penguins: 'This book told me more about penguins than I wanted to know." "1

The American Eastern oyster has a sedentary sex life. In adult form both male and female oysters are unable to move. They are physically attached to the bottom or bed (rock, shell or other cultch). But between May and October female oysters release eggs and male oysters release sperm. Spawning occurs upon the chance encounter of egg and sperm in the water over the bed. The resulting larva, after six or seven days, acquires a shell (thereby becoming known as a spat) and settles back to the bed where it attaches itself to the cultch. This process is referred to as spatfall. The set or number of spat which attach themselves to the cultch in a given area depends on the availability of a clean, firm surface and varies according to current, temperature and salinities.2

Maryland's Chesapeake Bay waters afford an almost perfect environment for these biological processes. Although lacking a single area with a high rate of spatfall (such as the James River in Virginia), setting is good in many places. Vast expanses of bottom are covered with waters of hospitable temperatures and salinities. Moreover, the sheltered, less saline waters of the Bay afford relative freedom from both predators (for example, starfish and oyster drills) and the disease MSX that has substantially ruined oyster production in Long Island Sound, Delaware Bay and some Virginia waters.8

Notwithstanding these natural advantages, Maryland oyster production has suffered a dramatic decline. In 1880, the Maryland fishery produced 71.9 million pounds of oysters; in 1962, it produced 8.1 million pounds.4 In part, this decline can be attributed to biological changes in the estuary. Pollution has reduced the availability of oxygen; shoreline construction has resulted in erosion which has silted over beds; fertilizers and municipal wastes have produced plant growth which has displaced the food of oysters; and herbicides and

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^{1.} J. Thurber, The Years with Ross 236 (1957).

^{2.} F. Christy, Jr., The Exploitation of a Common Property Natural Resource: The Maryland Oyster Industry 40-45, 1964, (unpublished U. of Mich. Ph.D. dissertation 1964, available from University Microfilms, Inc., Ann Arbor, Mich.) [hereinafter cited as Christy, The Maryland Oyster Industry].

^{3.} Id. See also J. McHugh, Fisheries of Chesapeake Bay, in Proceedings of the Governor's Conference on Chesapeake Bay 135, 152-53 (1968).

^{4.} Christy, The Maryland Oyster Industry 112-13.

pesticides have had a toxic effect on oysters.⁵ But economics rather than biology account for most of the decline in yield. The vast preponderance of Maryland oyster beds are treated as a commons, and oysters as common property. In the absence of controls on exploitation from some source, this treatment inevitably leads to depletion of the oyster fishery.6 This paper will examine the nature of economic problems occasioned by treating oysters as common property and the effectiveness of the response by the State's legal institutions.

THE TRAGEDY OF THE COMMONS

The development of Maryland's oyster industry provides a classic example of the "tragedy of the commons." When Maryland was first settled, oysters were in surfeit. Seemingly inexhaustible, they were treated as common property (like water and air) available to all for the taking. This arrangement worked well for several centuries until oystermen began to take more oysters than the fishery could naturally replenish. At this point the inexorable decline began. Rational ovstermen realized that it was in their economic interest to increase the catch so as to maximize their gain. Although the oystermen realized that they were depleting the resource upon which their livelihood depended, they had no incentive to reduce their catch or otherwise cultivate the bed (and thereby sustain the yield) since there was no guarantee that other oystermen would follow suit. Oysters were harvested to the point where the number of spawning oysters was so reduced that the reproductive capacity of the fishery was greatly diminished. Shells were removed in such great number that oyster beds were smothered by encroaching silt.8

Treatment of oysters as common property has also resulted in application of excessive amounts of capital and labor to the fishery. The absence of limitations on the number of operations attracts additional oystermen to the industry whenever there is any difference between revenue and costs. As a result, total revenue has been shared by so many operators that no true profits remain to be divided — overall fleet costs just equal revenue. Accepting economic efficiency as a goal, this amount of effort is excessive since a reduction in the size of the ovster fleet would maximize the net economic revenue from the industry (to be shared by the oystermen or appropriated by the public) and at the same time permit those diverted from the oyster fishery to produce other goods and services.9

^{5.} Pollution has not only interfered with the physical yield of the fishery, but it has also necessitated the official closing of oyster beds because of health hazards. Section 228B of article 43 of the Annotated Code of Maryland authorizes the State Board of Health to close oyster beds because of their proximity to points of sewage outflow or because of a high bacteria count in surrounding waters. Md. Ann. Code art. 43, § 228B (1965). By 1968, 11,145 acres of natural oyster beds in the Baltimore region were so closed. P. Farragut, A Reconnaissance Study of the Chesapeake Bay 46 (Regional Planning Council, Baltimore, Md. 1968).

6. See generally F. Christy, Jr. & A. Scott, The Common Wealth in Ocean Fisheries 6-16 (1965).

7. Hardin, The Tragedy of the Commons, 172 Science 1243 (1968).

8. See generally Christy, The Maryland Oyster Industry 117-19.

9. See generally F. Christy, Jr. & A. Scott, The Common Wealth in Ocean Fisheries 6-11 (1965).

STATE CONTROLS II.

Maryland's legal institutions have not passively permitted the oystermen to decimate the fishery while dissipating their profits through competition. Several approaches have been taken: the State has itself made significant efforts to restore the productivity of the common property oyster fishery; the State has enacted regulations which both minimize depletion and attempt to protect the oystermen from the ravages of competition; and the State has taken faltering steps towards creation of a private property oyster fishery in which the decisions of oystermen are likely to promote the realization of the maximum net economic revenue from the fishery.

A State Restoration

Maryland oyster production has increased from an all-time low of 1,243,497 bushels during the 1962-63 season to a modern high in excess of 3,000,000 bushels during 1966-67. Annual production is expected to continue to exceed 3,000,000 bushels.¹⁰ This upswing is primarily a result of massive State efforts in planting shells and seed oysters on public grounds. Since 1961, ancient deposits of buried shells have been dredged up and replanted as oyster cultch. In addition, on beds where there is a relatively low natural setting rate, the State has planted seed ovsters. 11 These efforts, while effective in restoring some of the public oyster grounds, have incurred substantial public cost. During the period from 1960 through 1965, the State spent well in excess of five million dollars on these programs.¹²

Legislation enacted by the Maryland General Assembly in 1967¹³ and 1968¹⁴ was designed to pay such costs by earmarking various State revenues for repletion of fishery resources. The 1967 legislation created the Fishery Research and Development Fund and provided for payment into it of various revenues derived from tidewater resources. 15 In 1968, the General Assembly broadened the financial base of the fund by promulgating a schedule increasing the oyster taxes which are levied against oystermen according to the amount of their take.16

This change had the effect of increasing shellfish tax revenue from \$78,000 during the 1968 fiscal year to \$690,000 during the 1969 fiscal year.¹⁷ These new laws have been billed as sufficient to place the

^{10.} See 1969-70 Maryland Manual 168 (1970).
11. See J. Manning, Bay Fisheries Resources, in Proceedings of the Governor's Conference on Chesapeake Bay 91, 96 (1968).
12. Wye Institute, A Report on the Chesapeake Bay Fisheries of Mary-

LAND 60 (1966).

^{13.} Md. Ann. Code art. 66C, § 716 (Supp. 1969), amending Md. Ann. Code

^{13.} MD. ANN. CODE art. 66C, § 716 (Supp. 1969), amending MD. ANN. CODE art. 66C, § 716 (1967).

14. MD. ANN. CODE art. 66C, § 711 (Supp. 1969), amending MD. ANN. CODE art. 66C, § 711 (1967).

15. The Fund receives all moneys obtained from license fees, taxes, fines, penalties and forfeitures provided for under the oyster code and all royalties paid to the State for removal of oyster and clam shells from Maryland waters. See MD. ANN. CODE art. 66C, § 716 (Supp. 1969).

16. MD. ANN. CODE art. 66C, § 711 (Supp. 1969).

17. See 1969-70 MARYLAND MANUAL 817-18 (1970).

public oyster fishery on a "self-sustaining, non-subsidized" basis.18 Unfortunately, to date earmarked revenues have not been sufficient to meet the costs. In fiscal 1969, payments into the fisheries fund totaled \$910,549 while expenditures for tidewater resource management (the vast preponderance of which are for oyster repletion) totaled \$1,-432.679.19 The \$522,130 deficit was made up out of general funds for fiscal 1970 the State budget estimated the deficit at \$831,679.20 Moreover, although the State's repletion activities have increased the physical output of the oyster fishery, they are not likely to change the economic return per unit of input. Instead, they will attract additional oystermen and additional cost which will consume the increased revenues.21 Hence, the State, in placing the oyster fishery on a "selfsustaining" basis, has significantly subsidized the oyster industry without improving the economic lot of the oysterman; and the oyster fishery, while nominally a great State asset, diverts millions of dollars away from other State activities.

B. State Regulation

The State has only recently become involved in management of the oyster fishery through programs involving replanting of beds and sowing of seed oysters. Traditionally, the State sought to "conserve" the oyster fishery through regulations limiting the activity of private oystermen. But, as has been generally observed, "a great deal (perhaps the greater part) of what has been done in the name of 'conservation policy' turns out, upon subjection to economic analysis, to be worthless, or worse Most Maryland regulation of the oyster fishery fits within this model: nominally justified in terms of conservation, but in effect protecting special interests and increasing the cost of taking oysters without protecting either the capacity of the resource to reproduce itself or the return to individual oystermen.

1. Entry Restrictions

Maryland's oyster laws contain a series of provisions which restrict entry to the oyster fishery. In addition to various licensing requirements,28 access is generally limited to Maryland residents, access to "county waters" may be limited to county residents, and corporations are precluded from taking oysters. All of these restrictions can be rationalized as "conservation" measures since limitation on the number of economic units which participate in the taking tends to minimize depletion. On realistic examination, however, even this rationalization proves invalid since even after imposition of these

^{18.} See J. Manning, supra note 11, at 97.
19. See The Maryland State Budget for the Fiscal Year Ending June 30, 1971, at 366 (Jan. 1970).
20. Id.

^{21.} See F. Christy, Jr. & A. Scott, The Common Wealth in Ocean Fisheries 15-16 (1965).

^{22.} Gordon, Economics and the Conservation Question, 1 J. LAW & Econ. 110-11

<sup>(1958).
23.</sup> See Md. Ann. Code art. 66C, §§ 698(c), 703(a) (1967); Md. Ann. Code art. 66C, §§ 698(b), 700(a), 703A(b) (Supp. 1969).

restrictions the number of units permitted to take oysters is so large that an excessive number take part and depletion occurs.24 In addition, as detailed below, these restrictions affirmatively interfere with effective management and development of the fishery.

The most basic restriction on entry to Maryland's oyster beds is a provision limiting access to residents.²⁵ This limitation is modified by the Potomac River Compact of 1958 which provides that the Potomac fishery shall be "common to and equally enjoyed by citizens of Virginia and Maryland."²⁶ Discrimination against non-residents is understandable; Maryland's General Assembly cannot be expected to voluntarily share the Bay's bounty. However, a broad statutory prohibition of this sort interferes with efficient management. For example, Dr. J. L. McHugh, Deputy Director of the Bureau of Commercial Fishery, has detailed mutually advantageous trade-offs which are a present possibility between Maryland and Virginia:

Maryland's success in improving her oyster production recently has come about through two cases [sic], a massive State program to plant shell and living oysters on public grounds, and relative freedom from the marine blights and pests that have wrecked the oyster industries in . . . most parts of Virginia.

Maryland does not have a single large and reliable natural seed oyster bed like the James River in Virginia Maryland also has had a shortage of shell for planting back on oyster grounds. Public policy and fishery laws of the two states effec-

24. Christy, The Maryland Oyster Industry 109.
25. Mp. Ann. Code art. 66C, § 698(c) (1967).
26. Potomac River Compact of 1958, art. III, § 4, codified in Mp. Ann. Code art. 66C, § 261A (1967).

This Compact is the product of an interesting chapter of history. The Potomac serves as a boundary between Maryland and Virginia. The original grant to Lord Baltimore made the "further bank" of the Potomac the southwest boundary of Maryland. The grant of the northern neck of Virginia made by King James II to Lord Culpeper likewise was bounded by the Potomac River and seemed to include the river bed (i.e., "together with the said rivers themselves and all islands within the outermost banks thereof"). Despite this ostensible conflict, Maryland's claim to the bed of the Potomac has never been seriously controverted; but since colonial times, disputes have continuously arisen as to the rights of use and navigation. In 1785, Maryland and Virginia entered into a compact resolving some of these disputes. Virginiar relinquished her right to charge tolls for Maryland's undertaking to permit Virginians free access to the Potomac and Maryland portions of the Bay. In addition, it was provided that citizens of both states were to have a common right of fishery in the Potomac. See generally C. Everstein, The Compact of 1785, at 29-34 (Leg. Council of Md. Research Rep. No. 26, 1946).

Subsequent adoption of the federal Constitution made the free access provisions of the Compact of 1785 obsolete, leaving the provisions relating to the Potomac fishery as the only operative sections. The Compact provided for regulation of the fishery through concurrent (Maryland and Virginia) legislation. Over the years this rather cumbersome regulatory mechanism raised various legal problems. More significantly, Maryland and Virginia oystermen and marine police engaged in various skirmishes. There were charges and counter-charges that the marine police and courts of the respective states were selectively enforcing various restrictions (primarily the prob

tively prevent maximum use of the Bay for growing oysters. If these legal barriers did not exist the Bay could be managed as a gigantic oyster farm, making best use of the characteristics of each part of the environment to produce seed, to serve as growing grounds, or as fattening or holding grounds.²⁷

Exclusion of Virginians from Maryland oyster ground is, of course, one of the legal barriers to the development of such an oyster farm.

Maryland oyster laws embrace another sort of institutionalized parochialism: county residency is used as a criterion for limiting access to the oyster fishery within "county waters." This limitation is an old one, first appearing in Maryland law in 1829 when the General Assembly decreed that only "citizens of the counties bordering on waters" could take oysters "within three hundred yards of low water mark."29 Not only is this limitation questionable in terms of conventional notions of fairness.⁸⁰ but it has also set the stage for the development of fundamental problems of oyster management.

Because of the traditional use of county residency as a device for limiting access, watermen have politically organized on a county-bycounty basis. The Maryland General Assembly has institutionalized comity techniques through which local bills or local exemptory amendments to general bills are passed at the request of county delegations.³¹ County watermen's associations have prevailed upon their respective county delegations to pass various laws applicable only to that county's waters. Since eleven Maryland counties abut tidewaters which contain substantial oyster grounds and since the main arm of the Chesapeake has been treated as being without the waters of any county, Maryland's oyster code is really a compilation of laws applying different rules to twelve different geographical units.32

Some of the geographical distinctions found in these ovster laws can be justified, or at least rationalized. Valid resource management reasons exist for separate regulation of the oyster fishery in Worcester County. Worcester County waters are not part of the Chesapeake Bay estuarine system but rather a part of the coastal Chincoteague and Assawoman Bays. Oysters found in these more saline waters are known as "salt" oysters, are in greater demand for the "on the half shell" market, and have a higher market price than oysters from the less saline waters of Chesapeake Bay.83 But for the most part, the myriad county-by-county variations found in the ovster

^{27.} J. McHugh, supra note 3, at 152-53.
28. See Md. Code Ann. art. 66C, §§ 700, 702 (1967).
29. Ch. 87, § 6, [1829] Md. Laws.
30. See notes 34-48 infra and accompanying text.

^{31.} See J. Spencer, Contemporary Local Government in Maryland 15-19

<sup>(1965).

32.</sup> See Md. Ann. Code art. 66C, §§ 696-710A (1967); Md. Ann. Code art. 66C, §§ 698(b), 699(b), 700(a), (c), (d), (e), (f), (h), (l), 701(a), 702(d), 703A, 706(d), 707(b), (d), (g), (j), 708(o), (u), (w), 710A (Supp. 1969).

33. See Christy, The Maryland Oyster Industry 102-05. While the laws relating to the Worcester County fishery are not peculiar, the oyster fishery has in fact developed in a much different manner. Through agreement (rather than legal procedures) oystermen have parceled out exclusive use rights among themselves and developed "private" oyster farms. For the most part, they ignore any laws which interfere with their operations. Id.

laws have no rational justification but merely represent a disjointed compilation of local laws. As such they prevent unified and uniform

management.

Moreover, the development of the notion of disparate "county waters" for the eleven oyster counties has given rise to legalistic problems of definition. Terrestrial boundaries of counties are generally surveyed, well-marked and therefore not difficult to ascertain. But in Maryland, which is bisected by an estuary, the extent to which the boundaries of a county embrace areas of tidewater becomes problematic. The common law response to the problem proved less than adequate for Maryland. Common law presumed (in the absence of a statutory provision to the contrary) that the boundaries of counties on either side of a body of navigable water extended to the center.84 While this approach might be more or less effective in dividing a river between opposite riparian counties, it has little efficacy in parceling out a sprawling, many-fingered estuary between a number of shoreline counties.

The Maryland legislature has responded to the problem in a piecemeal fashion. The colonial statutes creating tidewater counties merely described them as bounding on various rivers and creeks and the Chesapeake Bay without parceling out portions of the tidewater in a systematic fashion.³⁵ But in 1704, the colonial assembly explicitly dealt with the problem with the following legislation:

AND, whereas there are several counties that are divided by navigable rivers, and no rule yet made how far the jurisdiction of each county shall extend on the river, BE IT THERE-FORE ENACTED, by the authority aforesaid, That every county lying on any navigable river in this province shall extend its jurisdiction from the shore to the channel of such river that divides the county, and be divided from the other county by the channel of the said river; and that where any ship or vessel shall ride at anchor in the channel of such river, process may be served on board the said ship by the officer of either county that can first serve it, but when moored by any hold on the land, shall be supposed to lie in that county to whose shore she is fastened, if moored.36

This law is still in force, with only minor grammatical changes, in article 75 of the Annotated Code of Maryland; 37 but it was apparently read not to extend county jurisdiction into the main arm of the Bay since in 1908 it was thought necessary to enact a companion statute which applies more or less the same rule to all navigable waters of the State.38 This latter statute also provided a mechanism for me-

^{34. 2} H. FARNHAM, WATERS AND WATER RIGHTS 1482 (1904).
35. See, e.g., ch. 3, §§ 1-4, [1706] Md. Laws (defining boundaries for Talbot, Queen Anne's, Kent and Cecil Counties).
36. Ch. 92, § 3, [1704] Md. Laws.
37. Md. ANN. Code art. 75, § 81 (1967).
38. Md. ANN. Code art. 75, § 82 (1967) (originally enacted as ch. 487, § 1, [1908] Md. Laws 223): "The jurisdiction of every county bounded at any point by navigable waters shall extend from the shore to the inside of the channel."

morializing the boundaries it described by providing for the establishment of county maps.³⁹ To the extent that these statutes merely authorize county sheriffs to serve process in a given expanse of water, they have been replaced by a rule of procedure promulgated by the Maryland Court of Appeals;⁴⁰ but, at least according to a Maryland trial court, these statutes also define "county waters" for purposes of determining the applicability of oyster laws.⁴¹

In addition, the Haman Law, enacted in 1906 in an effort to liberalize procedures for creating private oyster leases, called for a survey of submerged tidelands, primarily for the purpose of determining the location of natural oyster bars. 42 However, since the law drew certain distinctions between leasing "within the territorial limits of any of the counties" and leasing "in any other place," it was also incumbent on the surveyor to plot county lines. 48 Accordingly, the charts which were prepared between 1906 and 1912 established territorial limits for counties. Under the original statute the surveyor was given no directions as to how to delimit territorial boundaries. But the 1945 recodification of the oyster laws ratified the territorial limits that the surveyor had established by including them in the statute's definitional sections, thereby creating another set of boundaries for the tidewater counties.44 The county boundaries in the charts established pursuant to article 66C are similar but not identical to those established under article 75.45 Hence, in the application of the oyster laws, there are two sets of county waters from which to choose.

The notion of county waters has also created another problem. The oyster laws contain a variety of criminal penalties. Since the jurisdiction of trial courts generally extends only to crimes committed within a particular county, 46 the problem arises as to which court has authority to try a person charged with a criminal violation on the tidewaters. As early as 1809, the General Assembly provided a general mechanism for establishing venue for crimes committed on Chesapeake Bay. This statute is presently codified in section 588 of article 27 and in pertinent part reads as follows:

Any person who shall commit any crime, offense or misdemeanor upon the waters of the Chesapeake Bay, within the limits of this State, and without the body of any county thereof . . . may be indicted and tried in any court of this State having jurisdiction of similar crimes, offenses and misdemeanors, of the county in which he may be arrested, or into which he may first be brought.⁴⁷

^{39.} Md. Ann. Code art. 75, § 83 (1967) (originally enacted as ch. 487, § 2, [1908] Md. Laws 224).

^{40.} Mp. R.P. 104(a). The sheriff may serve process wherever he finds the party, whether in or out of the county of the court from which the process was issued.

^{41.} State v. Thomas (Cir. Ct. of Queen Anne's County, May 28, 1957).

^{42.} Ch. 711, § 86, [1906] Md. Laws. See note 83 infra and accompanying text.

^{43.} Ch. 711, § 98, [1906] Md. Laws.

^{44.} This definition is now found in Md. Ann. Code art. 66C, §§ 696(j), (l) (1967).

^{45.} State v. Thomas (Cir. Ct. of Queen Anne's County, May 28, 1957).

^{46.} See Md. Ann. Code art. 26, § 30 (1966).

^{47.} Md. Ann. Code art. 27, § 588 (1967).

But the appropriate venue in criminal cases involving violation of the oyster laws remains confused as a result of a 1956 amendment to this section. At its 1955 session the General Assembly passed a law exempting persons violating the oyster and clam laws from the application of what is now section 588 and providing instead: "If the said violation occurred in any waters adjacent to and contiguous with any tidewater county, the Court having jurisdiction in the county where the violation occurred shall have jurisdiction thereby." It appears likely that this legislation was passed at the behest of watermen (who are organized on a county-by-county basis) to statutorily guarantee a "home court" advantage. The Governor, however, vetoed the bill. In his message explaining the veto, Governor McKeldin included the following opinion of the Attorney General:

The worst feature of the Act is that it creates a vacuum, a place where no court could have jurisdiction over an offender of the conservation statutes. We refer to this sentence — "If the said violation occurred in any waters adjacent to and contiguous with any tidewater county, the courts having jurisdiction in the county where the violation occurred shall have jurisdiction."

If a violation should occur in waters adjacent to a tidewater county, where would such waters be? Adjacent is synonymous with contiguous; both mean adjoining or neighboring. In other words, the offense might occur in the neighboring waters, not in a county, but in the Chesapeake Bay or other body of water outside the boundaries of any county. Therefore, since the violation would not have occurred in any county . . . there would be serious question as to whether any court has jurisdiction. The statute, as it would be amended by Senate Bill No. 101, does not simply say that if any violation occurs in the waters of any county, the courts having jurisdiction of the county where the offense occurs shall have jurisdiction.

Despite this infirmity, the General Assembly overruled the veto at the next legislative session and the bill became law.⁵⁰ Hence, there is a possibility that no court may have jurisdiction to try those charged with violating oyster laws in "waters of the Chesapeake Bay."

Finally, another discriminatory limitation on entry is found in Maryland's oyster laws — corporations are effectively precluded from engaging in the business of taking oysters. Tonging licenses are only available to natural persons, ⁵¹ dredging licenses are only available to

^{48. [1955]} Md. Laws 1276, 1277. The bill passed by the legislature was Senate Bill No. 101, the quoted portion of which is contained in Governor McKeldin's veto message of May 9, 1955. Id.

^{49.} Id

^{50.} Ch. 13, [1956] Md. Laws 16. The act passed added an exception to section 675 of article 27 (presently section 588) which exempted section 665 of article 66C (presently section 717) from its provisions and added the above quoted language to section 665. See text accompanying note 37 supra.

^{51.} See Md. Ann. Code art. 66C, § 700(a) (Supp. 1969).

persons who are "bona fide" owners of a dredge boat and who take an oath that "there is no lien on said boat held by a non-resident," and corporations are expressly prohibited from leasing private oyster grounds. Hence, the ruggedly individualistic oysterman is insulated from corporate competition; but, since in our economy the corporation is the favored device for assembling capital and management talent, the State and oyster industry are deprived of investment and innovation.

2. Depletion Controls

Not surprisingly, when the yield of the oyster fishery began its dramatic decline, the Maryland legislature responded with direct controls on exploitations. As noted, these controls vary from the waters of one county to the next. However, it is possible to extract from the resulting morass certain types of restrictions which cut across county lines. These controls take the form of gear restrictions, size limits, and limited seasons. With various degrees of persuasiveness, these controls can be justified as protecting the oyster fishery from physical depletion.

Tongs (a pair of iron rakes with handles from twelve to twenty feet long joined together like a forcep) have been used to gather Maryland oysters since the mid-1600's. ⁵⁴ In the early 1800's, the dredge (a scoop used to take oysters by dragging) was introduced in the Bay by New Englanders. ⁵⁵ It was at first outlawed, nominally on the grounds that the dredges dug too deeply into the bed and stirred up bottom mud and were therefore injurious to the oyster beds, but perhaps more realistically because the established tongers did not like this new source of competition. But in 1865, dredging was legalized in certain waters ⁵⁶ — not surprisingly the deeper waters of the Chesapeake Bay, which were unsuitable for tonging anyway. Over the years dredgers have from time to time illegally invaded shallow water, with warfare resulting; ⁵⁷ but with multitudinous exceptions the principle of Chesapeake Bay for dredgers and county waters for tongers is still found in the oyster laws today. ⁵⁸

The gear restriction with the most significant economic impact is the prohibition against dredging for oysters under motor power.⁵⁹

^{52.} Md. Ann. Code art. 66C, § 702(b) (1967). It is relatively clear in the context of section 702(b) that the term "person" is only intended to embrace natural persons. Arguably though, the section might permit issuance of dredging licenses to domestic corporations. See Md. Ann. Code art. 66C, § 696(m) (1967); cf. Md. Ann. Code art. 81, § 2(13) (1965). The administering agency, at least in recent years, has not been faced with the problem since no corporations have applied. Telephone interview with Harold A. Davis of the Fish and Wildlife Administration, September 1, 1970.

^{53.} Mp. Ann. Code art. 66C, § 708(e) (1967).

^{54.} M. Brewington, Chesapeake Bay 171 (1956).

^{55.} Id.

^{56.} Ch. 181, § 1(2), [1865] Md. Laws 338.

^{57.} See M. Brewington, Chesapeake Bay 173 (1956).

^{58.} See Md. Ann. Code art. 66C, §§ 700(i), 702(b), (c), § 703(h) (1967).

^{59.} See Mp. Ann. Code art. 66C, § 702(k) (1967).

The need for this restriction is dramatic — whereas tongers can take between six and fifty bushels of oysters per day, a power dredge can take 1400 bushels per hour. In the absence of this restriction, Maryland's public oyster beds would be harvested in a matter of days. 60

Size limitations and attendant culling requirements also have a significant effect on maintenance of the oyster fishery. Indiscriminate removal of cultch was a major factor in the decline of the fishery. In the 1800's, oyster shells were ground up for chicken feed or used in building county roads. As a result, incursions of mud smothered what had once been productive oyster grounds. The General Assembly first responded to this problem in 1800 with a law which required that all oysters be culled over their natural beds. In the intervening ninety years various details have been added, but a successor is still in effect. In its present form the law requires return to the bottom of all old oyster shell and all oysters less than three inches in length, thereby protecting the breeding stock of young oysters as well as the oyster bed itself.

Finally, the oyster laws contain a variety of season limits most of which revolve around the "R" rule — oysters can only be taken in months with the letter "R" in their names. The tonging season is from September 15 through March 31, although it is longer in certain county waters and year round in Worcester County. 4 The dredging season is from November 1 through March 15. 5 The choice of season may be biologically questionable as a sustained yield measure since it permits taking in September, when oysters may still be spawning. 66

The effect of these controls on the rate of depletion is difficult to appraise. But it appears clear that, as presently enforced, they are not sufficient to sustain the physical yield of the fishery. This is well illustrated by the steady decline in production of public oyster grounds prior to the State's direct involvement in their restoration. Moreover, these restrictions result in a substantial public cost. Each of them reduces the efficiency of the oysterman: gear restrictions mandate archaic methods of taking; size limitations require expenditure of effort separating marketable from undersized oysters; and season limitations require that equipment lay idle for part of the year. These inefficiencies in turn bid up the unit cost of harvest and the price of oysters. In addition, the State maintains an "Oyster Navy" of over 100 motor boats and one helicopter along with over 100 tidewater policemen. Since a primary function of this fleet is the enforcement of oyster regulations, a portion of the \$1,343,510 expenditure of the

^{60.} Christy, The Maryland Oyster Industry 122-23.

^{61.} In Somerset and Worcester Counties, the taking of oysters for certain purposes was prohibited — for use as manure in Somerset and for making lime in Worcester. But the shells of oysters taken for consumption were not returned to the beds. Id. at 124.

^{62.} Ch. 198, § 40, [1880] Md. Laws 322.

^{63.} Md. Ann. Code art. 66C, § 699(a) (1967).

^{64.} Mp. Ann. Code art. 66C, § 700(1) (Supp. 1969).

^{65.} Md. Ann. Code art. 66C, § 702(i) (1967).

^{66.} See Christy, The Maryland Oyster Industry 123.

Division of Law Enforcement of the Department of Natural Resources must be attributed to such enforcement.67

3. Consequences

Maryland's system of public oyster grounds has engendered a variety of public controls which have been justified more or less on the basis that they are necessary to protect these grounds from depletion. These controls have failed, in and of themselves, to prevent depletion — perhaps because of inherent inadequacies, perhaps because of failures of enforcement. 68 But these controls have had numerous side effects: they discriminate, generally in favor of Maryland residents, more particularly in favor of certain county residents; they interfere with the development of mutually advantageous, cooperative arrangements between Maryland and Virginia; they mandate inefficiencies which increase the unit cost of harvesting oysters and foreclose the possibility of technological innovations; and they require the expenditure of substantial public funds for an "Oyster Navy" to enforce them.

4. Private Oyster Grounds

Economic theory provides a panacea for the ills of Maryland's oyster industry — the institution of exclusive use rights to oyster grounds. Traditionally, legal institutions have treated natural resources as common property only where there is either no governmental body with effective territorial jurisdiction over their situs (i.e., the high seas, ocean floor, arctic and antarctic regions or outer space) or physical obstacles to the effective delineation and assertion of private rights in them (i.e., air space, migratory fish and wildlife).69 The sedentary oyster, ensconced in the territorial waters of Maryland, fits within neither of these categories. It is not difficult to envision Maryland oyster grounds divided into private oyster farms like those in Long Island Sound and the Virginia tidewater.

It is also not difficult to catalogue, with a view towards economic efficiency, the advantages of private oyster grounds. Creation of exclusive use rights (whether through leasing or outright grants) would eliminate the necessity for legal restrictions on the methods and time of harvesting. Since each oyster farmer would have an incentive to

^{67.} See The Maryland State Budget for the Fiscal Year Ending June 30, 1971, at 371 (January 1970).

^{68.} Oystermen have an established reputation as scofflaws. In 1887, Goode's Fishery Industries of the United States described it as follows:

It is now rarely the case that a dredger can be found who will admit that he believes there is anything wrong in disregarding the oyster laws and such a thing as being disgraced among his fellow workmen by imprisonment for violation of the laws is totally unknown. In the above facts will be found sufficient reasons why it has been impossible for the oyster police, since its first organization, to enforce the laws. Seven hundred well-manned, fast sailing boats, scattered over such a large area as the Chesapeake Bay, are rather difficult to watch, and especially at night. especially at night. Quoted in R. Burgess, This Was Chesapeake Bay 136-39 (1963).

^{69.} See generally F. Christy, Jr. & A. Scott, The Common Wealth in Ocean Fisheries 6-7 (1965).

sustain the yield of his oyster grounds, the State would not need to protect these grounds from exploitation. Freedom from existing legal restraints would permit the oyster farmer to adopt the technology most suitable to maximizing his economic return (among the changes would certainly be the extensive use of power dredges). Each farmer would be able to adjust his output to take advantage of seasonal price variations and to determine the optimal size at which to market oysters according to market conditions. Private ownership of oyster grounds would, of course, eliminate the present congestion over prime oyster beds. Furthermore, State expenditures for the oyster industry could be reduced; and revenues from the industry could be expected to increase. Expenditures could be reduced since each oyster farmer would assume the financial responsibility of cultivating his beds leaving the State only with responsibility for policing and administration. Assuming open market conditions, values would develop for oyster grounds; and the State could be expected to charge private holders an acreage tax or lease fee fairly reflective of these values.⁷⁰

Maryland has had long, albeit frustating, experience with the development of such private oyster grounds. In 1830, the Maryland General Assembly first provided a method through which individuals could acquire certain exclusive property rights in submerged tidelands. Maryland citizens were given authority to appropriate and exclusively use an area for the purpose of "depositing, bedding or sowing any oysters, or other shell fish." Riparian proprietors were given first choice in staking out a claim adjacent to their land, and county citizens were given exclusive rights to beds within county waters. Initially, the law only allowed appropriation of one acre on the Eastern Shore; that it was extended to the Western Shore in 1833⁷⁵ and amended to allow lots of up to five acres in size in 1865.

This law was tinkered with from time to time but remained in effect in much the same form until 1867. In *Phipps v. State*,⁷⁷ the constitutionality of the law was questioned on the ground that it conferred special privileges inconsistent with the common right of free fishery in state waters. The Maryland Court of Appeals apparently assumed a constitutional right to a common fishery but went on to find that the statute did not violate it. In the following passage the court rather cryptically explained its reasoning:

As we construe it, this privilege subtracts nothing from the common right of fishery, nor can it be said to operate as a grant of several rights from the common right, residing in the body of the people. The natural beds of deposits of the ovster do not ex-

^{70.} See generally Christy, The Maryland Oyster Industry 170-73.

^{71.} Ch. 87, [1829] Md. Laws.

^{72.} Id. at § 1.

^{73.} Id. at §§ 2, 6.

^{74.} Id. at § 4.

^{75.} Ch. 265, § 1, [1832] Md. Laws.

^{76.} Ch. 181, § 1(22), [1865] Md. Laws 343.

^{77. 22} Md. 380 (1864).

tend to all the waters of the State, and at most, the argument that the common right to fish for and take them is impaired by the artificial deposits here authorized, would hold good only on proof that a natural bed or deposit is appropriated to the artificial use. It is settled that the lands of the State covered by navigable water, may be granted, subject to the public right of navigation and fishery; and independent of the question, as to the power of the Legislature to restrict those rights by grants in severalty, it is clear that they may be aided by grants, conferring particular privileges. The power of the Legislature to authorize the erection of wharves, and the reclamation of land from the water, for the purpose of encouraging navigation and commerce, has never been questioned, notwithstanding the effect has been to confer privileges and advantages wholly private and exclusive in their character. And there appears to be no substantial reason why it may not in like manner, grant privileges affording particular and exclusive benefits, for the purpose of increasing generally the product and value of the common right of fishery. The tendency of the privilege, here conferred is undoubtedly in that direction. It affords the citizen enjoying the common right, the means of preserving, and increasing in value the fruits of his labor, — a result substantially enhancing the worth of the right enjoyed, and contributing also to the general comfort of the people and prosperity of the State. It is not necessary to decide, in this case the very important and perhaps delicate question, as to the power of the Legislature to grant several or exclusive rights of fishery in navigable waters, and we forbear the expression of any opinion upon it. It is enough to say that the grant here objected to, does not involve that question.78

Presumably in response to these equivocations as to the constitutionality of private oyster privileges, the Maryland General Assembly added a proviso to the statute in 1867.⁷⁹ It stated that "no natural bar or bed of oysters shall be located or appropriated."⁸⁰ This improvisation in turn introduced the new problem of making a distinction between "barren" beds (upon which individuals could acquire exclusive oyster rights) and "natural" beds (upon which individuals could not). In 1881, Judge Goldsborough of the Circuit Court of Dorchester County made the first effort to strike such a distinction with the following statement:

Land cannot be said to be a natural oyster bar or bed merely because oysters are scattered here and there upon it, and because, if planted they will readily live and thrive there; but whenever the natural growth is so thick and abundant that the public resort to it for livelihood, it is a natural oyster bar or bed, and

^{78.} Id. at 389-90.

^{79.} Ch. 184, § 29, [1867] Md. Laws 337.

^{80.} Id.

comes within the above quoted restriction in the law, and can not be located or appropriated by an individual.81

The so-called "Goldsborough rule" was never tested in the Maryland Court of Appeals because that court subsequently ruled that no appeal lay from the determination of a trial court on the subject, 82 but the substance of the rule has been affoat in the brine of Maryland jurisprudence ever since.

By the early twentieth century the catch of oysters had declined drastically from the historic highs of the 1880's. As a response B. Howard Haman, a Baltimore lawyer, advocated a new system for more extensive cultivation of barren bottoms. The bill he drafted was enacted in 1906.83 The law created the Board of Shell Fish Commissioners84 and directed it to lease barren bottom to Maryland residents for the purpose of oyster culture.85 Leases were to be for twenty years, and a rent schedule was included in the statute.86 The act directed that a survey be made of the "natural oyster beds, bars and rocks" and that they be marked by State buoys and excluded from the operation of the leasing arrangement.87 Following adoption of the Haman Act, there coexisted a profusion of methods through which Maryland residents could acquire private oyster rights. In addition to leases under the Haman Act, it was still possible to have riparian rights or leasehold or freehold interests under the original 1829 legislation and its successors.88 This mixed marriage was permitted to continue until the oyster laws were recodified in 19458 so as to substantially abolish riparian rights, leaving leasing as the only statutorily mandated mechanism for private oyster culture.90

The Haman Act failed in its intended purpose. Just as the homesteader on Western lands met with opposition from cattlemen who were accustomed to open range, the oyster farmer was met with opposition from oystermen accustomed to an open fishery. These oystermen have effectively used legal institutions to prevent development of a private oyster fishery.

The first attack on the private oyster fishery occurred in 1914. From 1906 through 1912, Charles Yates conducted the survey called for by the Haman Act. 91 The so-called Yates Survey classified 216

^{81.} Winder v. Moore (Cir. Ct. of Dorchester County, 1881), as quoted in Department of Tidewater Fisheries v. Catlin, 196 Md. 530, 533 (1950).

82. Jackson v. Bennett, 80 Md. 76 (1894). The judgment of the trial court was not appealable because, when a court exercises "a special jurisdiction conferred by statute," the judgment is considered final unless the statute provides appeal. Id. at 77.

^{83.} Ch. 711, [1906] Md. Laws 1182.

^{84.} Id. at § 1(84), at 1183.

^{85.} Id. at § 1(98), at 1188.

^{87.} Id. at § 1(86), at 1184.

^{88.} See notes 71-76 supra and accompanying text.

^{89.} Ch. 929, [1945] Md. Laws 1402.

^{90.} Id. at § 2(12), at 1425. Existing law continues to recognize a riparian preference in any "creek, cover or inlet not exceeding one hundred yards at low water in breadth at its mouth." MD. ANN. CODE art. 66C, § 708(aa) (1967).

^{91.} See note 87 supra and accompanying text.

thousand acres as natural oyster bars, forty-four thousand acres for crabbing and clams, and the balance as barren. The Haman Act itself contained no definition of natural oyster bars, and many oystermen felt that not all such bars had been included. They convinced the Maryland General Assembly to amend the Haman Act to provide for the resurvey of disputed bottom and to elevate the Goldsborough rule to statutory status with the following language: "The term natural beds or bars' whenever used in this Act shall hereafter be construed to mean and include all oyster beds and bars under any of the waters of this State whereon the natural growth of oysters is of such abundance that the public have successfully resorted to such beds or bars for a livelihood . . . within five years."

Pursuant to this amendment, 54,000 acres were reclassified from barren bottom to natural oyster bar and thereby excluded from the leasing provisions. Private oyster lessees attacked the constitutionality of this amendment on the ground that it created procedures which could be used to impair contractual rights under existing leases, but the Maryland Court of Appeals made short shrift of this argument by pointing out that the statute guaranteed a lessee compensation if his leasehold was so taken. 96

The procedures created by the 1914 legislation have effectively hamstrung the granting of oyster leases. This is best exemplified by the fact that between 1914 and 1963 the acreage of "natural oyster bars" increased from 270,000 to 285,000.97 This increase does not represent a real increase in productive areas but rather is a by-product of unsuccessful efforts to acquire leases. Under the procedures existing since 1914, a lease application can be challenged in court. If the final decision is that the area sought is a natural oyster bar, the application is denied; and the area is officially reclassified on the oyster charts.98 In practice almost any protest has served to frustrate a lease application, and the net addition of 15,000 acres is a result of reclassifications following such rejections.99

Public oystermen have, moreover, effectively solidified these gains with legislation. In 1945, they argued before the Court of Appeals

^{92.} Christy, The Maryland Oyster Industry 89.

^{93.} Ch. 265, § 2(89), [1914] Md. Laws 381.

^{94.} Id. at §2(83), at 379.

^{95.} Christy, The Maryland Oyster Industry 89-90.

^{96.} See Cox v. Revelle, 125 Md. 579, 586 (1915); Board of Shell Fish Comm'rs v. Mansfield, 125 Md. 630 (1915). The Cox decision determined that the amendment did not contravene article III, section 40 of the Maryland Constitution (prohibiting the taking of private property for public use without just compensation) nor was it in conflict with article I, section 10 of the United States Constitution (prohibiting state legislation impairing the obligation of contracts).

^{97.} Christy, The Maryland Oyster Industry 93.

^{98.} See MD. ANN. CODE art. 66C, § 708(k) (1967) (originally enacted as ch. 265, § 2(94-B), [1914] Md. Laws 387.

^{99.} Christy, The Maryland Oyster Industry 93-96. But cf. Department of Tidewater Fisheries v. Catlin, 196 Md. 530 (1950), where the Maryland Court of Appeals reversed the trial court judgment that the area in question was a natural oyster bar because there was no evidence — other than the testimony of oystermen that they had occasionally seen others oystering in the area — that any oysters had been taken from the area recently.

that, once bottom land was classified as a natural bed, it was always a natural bed, even if the oyster supply was subsequently diminished so that it was no longer productive. The court disagreed, ruling that a lease application could be properly entertained for any bottom (regardless of how designated on existing charts) and that it was then incumbent on the Department of Tidewater Fisheries to determine whether the bottom in question was in fact a natural bar. Shortly after this decision, the General Assembly amended the law so that the Department could only reclassify submerged areas from natural oyster bed to barren bottom through a cumbersome procedure including public notice, hearing, and a jury trial if anyone disagrees with the Department's decision. Subsequent legislation assured that the above procedure is the only method to change bottom classifications by divesting the Department of authority to change natural bars to barren bottom as part of an overall resurvey.

Opposition to private oyster leases continues unabated. During the 1950's, oystermen in Dorchester and Somerset Counties struck a blow for a public oyster culture by having the General Assembly prohibit the issuance of oyster leases in those counties altogether. ¹⁰⁴ Furthermore, the opposition to private leasing has a new impetus. Since 1945, natural clam and crab beds have been explicitly exempted from leasing. ¹⁰⁵ In the early 1950's, Fletcher Hanks of Easton, Maryland, developed a hydraulic clam rig which made the taking of softshelled clams efficient. The result has been a marriage of convenience between strange bedfellows. Clammers and public oystermen are natural rivals since they compete for much of the same bottom, but they have a common interest in preventing the development of an expansive private oyster culture. Hence clammers have joined in the fight against private leasing and, according to one authority, had managed to become the primary force behind such opposition by 1964. ¹⁰⁶

Even if an oysterman is able to acquire a lease, he still faces substantial problems. He is limited to relatively small acreage; the bed presumably will be of marginal quality; and seed oysters are difficult to grow and hard to obtain from public sources. ¹⁰⁷ In addition, a lessee's operation can be made subject to various local laws which, at least in economic theory, have no reasonable application. As initially enacted, the Haman Act provided that the holders of oyster land could take oysters "in any manner and at such times as may be de-

^{100.} Popham v. Conservation Comm'n, 186 Md. 62, 67-68 (1946).

^{101.} Id. at 71-74.

^{102.} Ch. 725, [1947] Md. Laws 1775 [now Md. Ann. Code art. 66C, § 708(d) (1967)].

^{103.} Ch. 638, [1963] Md. Laws 1373 [now Mp. Ann. Code art. 66C, § 707(i) (1967)].

^{104.} See Mp. Ann. Code art. 66C, § 709 (Somerset County), § 710 (Dorchester County) (1967).

^{105.} Ch. 929, § 2(12), [1945] Md. Laws 1425 [now Md. Ann. Code art. 66C, § 708(b) (1967)].

^{106.} See Christy, The Maryland Oyster Industry 91-93; cf. Smack v. Jackson, 238 Md. 35 (1965), where a clammer successfully contested the issuance of a lease for oyster cultivation, contending the area was a natural clam bar.

^{107.} See Christy, The Maryland Oyster Industry 97-98.

sired."108 This provision recognized that, since strictures on the methods and time of taking are primarily designed to sustain the yield, they need not be applied to private oyster beds where there is a built-in economic incentive to accomplish this goal. A provision authorizing the removal in any manner of oysters planted on private leases is still nominally in effect, but over the years almost all of the counties with oyster grounds have exempted themselves from application of the general rule and substituted a requirement that only the relatively inefficient tongs or patent tongs be employed. 109

In short, it appears that Maryland's private oyster fishery has proved a political failure. This failure can be blamed on the responsiveness of the State's administration and General Assembly to the special pleas of traditional watermen. Development of political support for a private property oyster industry appears prerequisite to significant change.

III. CONSTITUTIONAL CATHARSIS

Commentators have been pessimistic about the prospects for extensive reform of the oyster laws. 110 Oystermen, through their county organizations, have traditionally held great sway over the General Assembly and have used it to perpetuate the status quo. The success of the watermen's lobbying efforts was once explained by the excessive representation in the Assembly of the ovster counties; but this success has survived reapportionment, perhaps through organization, perhaps through inertia.

Despite the continued political power of oystermen, it is submitted that reform can be presently accomplished. Discriminations, generally violative of the United States Constitution, permeate Maryland's existing oyster laws. These discriminations — the limitations on entry which exclude non-residents and corporations from the oyster fishery, and which exclude county non-residents from certain portions of the oyster fishery — are impermissible, and, moreover, are so pervasive that they cannot be effectively extricated from the body of the laws. Hence a successful judicial attack would be so cathartic that reform would then become politically feasible.

The basic restriction on entry excludes citizens of other states from Maryland's oyster fishery.¹¹¹ This disparate treatment of citizens and non-citizens is constitutionally infirm since exclusion of

J. McHugh, supra note 3, at 153. 111. Md. Ann. Code art. 66C, § 698(c) (1967).

^{108.} Ch. 711, § 1(112), [1906] Md. Laws 1194.
109. See Md. Ann. Code art. 66C, § 708(u) (Supp. 1969). The question has also arisen as to the application of the State's cull laws (which require the throwing back of undersized oysters) to private oyster growers. The Maryland Court of Appeals at first found the cull laws applicable to private oyster farms, Windsor v. State, 103 Md. 611, 618 (1906), but subsequently reversed itself in Department of Tidewater Fisheries v. Sollers, 201 Md. 603 (1953), on the basis of an elaborate exercise in statutory construction and the following policy grounds: "It may . . . be observed that if private planters were compelled to put the shells back in areas where they would not catch spat, they would not have shells for areas where they would catch spat, thus frustrating the purpose of the law intended to be encouraged." Id.
110. See Christy, The Maryland Oyster Industry 188-89; Wye Institute, A Report on the Chesapeake Bay Fisheries of Maryland 7-10 (1966). But see J. McHugh, supra note 3, at 153.

non-citizens flies squarely in the teeth of article IV, section 2 of the United States Constitution, which provides: "The Citizens of each State shall be entitled to all Privileges and Immunities of Citizens in the several States."112

The very purpose of this clause was to forge a single nation;118 doing business was one privilege sought to be made reciprocal from state to state. Therefore, non-citizenship cannot be used as a basis for exclusion. For this reason, the Supreme Court in Toomer v. Witsell¹¹⁵ found a South Carolina statute which imposed an exorbitant shrimp boat license fee on non-residents unconstitutional.116 It is possible to argue that, since both Maryland citizens and noncitizens are excluded, the provisions preserving county waters for county residents do not violate the privileges and immunities clause. This argument is both logically and constitutionally unsound. It is not logical to uphold a state's exclusion of non-citizens from the oyster fishery simply because the state also prohibits its citizens from fishing for oysters outside of their respective counties; such a practice still results in the total exclusion of non-citizens from the fishery. Constitutionally, such treatment of non-citizens is supported by no authority. Those few cases which deal with this type of exclusion in the area of natural resources do so on principles of "state ownership." The state ownership theory, as hereinafter noted, is of doubtful validity today. 117 As for the exclusion of corporations from the fishery, since corporations are not "citizens," they lack the requisite status to come within the clause's protection. 118

Both provisions are suspect under the equal protection clause of the fourteenth amendment, which provides: "nor shall any State . . . deny to any person within its jurisdiction the equal protection of the laws."119 The scope of the equal protection clause is broader than that of the privileges and immunities clause in that it requires a reasonable iustification for any legislative classification rather than mere uniform treatment of state citizens and non-citizens and in that it protects "persons" regardless of whether they are "citizens."

The legislative classification which excludes all but county residents from county waters has some justification as a "conservation" measure. As has been observed, it is arguable that any restriction on

^{112.} U.S. Const. art. IV, § 2.

^{112.} U.S. CONST. art. IV, § 2.

113. Toomer v. Witsell, 334 U.S. 385 (1948). "The primary purpose of this clause . . . was to help fuse into one Nation a collection of independent, sovereign States. It was designed to insure to a citizen of State A who ventures into State B the same privileges which the citizens of State B enjoy." Id. at 395.

114. See, e.g., Ward v. Maryland, 79 U.S. 418, 430 (1870). In Ward the Court held unconstitutional a Maryland statute which imposed a license fee on non-resident traders that was much greater than the license fee for Maryland residents.

^{115. 334} U.S. 385 (1948).

^{116.} Id. at 395-99. The fees were \$25 per boat for residents, \$150 per boat for non-residents who had one or more boats licensed in the state during each of the past three years, and \$2500 per boat for all other non-residents. Id. at 390 n.11.

^{117.} See notes 140-53 infra and accompanying text (discussion of the "state ownership" theory).

^{118.} See, e.g., Hague v. CIO, 307 U.S. 496, 514 (1939); Orient Ins. Co. v. Daggs, 172 U.S. 557, 561 (1899).

^{119.} U.S. Const. amend. XIV, § 1

the number of economic units which participate in the taking tends to retard depletion. But such a justification is not enough. A county non-resident represents no peculiar threat to the fishery but merely the same threat as represented by a county resident. Hence there is no reasonable relationship between non-residents as a class and the danger to be avoided — depletion of a common property resource. The Supreme Court explicitly used this analysis in applying the privileges and immunities clause in Toomer v. Witsell¹²⁰ and implicitly used it in finding a California statute which precluded aliens from obtaining commercial fishing licenses unconstitutional under the equal protection clause. 121

More recently, a three-judge federal district court enjoined, as a denial of equal protection, enforcement of an Alaska statute which, through a licensing procedure, effectively excluded non-residents (and other newcomers) from the salmon fishery. 122 The court said, "Although a state may enact fishing regulations in the legitimate interests of conservation and safety, it may not, to achieve those ends, employ arbitrary and irrational means which create or protect local, monopolistic interests."123 As an alternative ground for its decision, the court found that the law also violated a provision of the Alaska Constitution. 124 The case was appealed, and during the 1969 term the United States Supreme Court found that the district court had erred in not abstaining since an Alaska court's evaluation of validity of the statute under state law might obviate any need to consider its validity under the United States Constitution. Despite this judicial runaround, the proposition of the district court (i.e., that restrictions on entry nominally designed to conserve the fishery, but in fact designed to protect local, monopolistic interest, deny equal protection) remains unchallenged. The Maryland system of restricting entry to county waters to county oystermen is an effort to do exactly this and therefore violates the equal protection clause. It is significant that the Attorney General of Maryland has so ruled. 126

^{120. 334} U.S. 385, 396-98 (1948). 121. Takahashi v. Fish & Game Comm'n, 334 U.S. 410, 418-20 (1948). 122. Bozanich v. Reetz, 297 F. Supp. 300 (D. Alas. 1969). 123. Id. at 305.

^{124.} Id. at 306. The statute was held to have violated article VIII, sections 3 and 15 of the Alaska Constitution:
3. Common Use. Wherever occurring in their natural state, fish, wildlife,

and waters are reserved to the people for common use.

15. No Exclusive Right of Fishery. No exclusive right or special privilege of fishery shall be created or authorized in the natural waters

lege of fishery shall be created or authorized in the natural waters of the State.

125. Reetz v. Bozanich, 397 U.S. 82 (1970).

126. The opinion of the Office of the Attorney General is contained in the May 4, 1965, gubernatorial veto message from Governor Tawes to Speaker of the House Marvin Mandel. In pertinent part, it reads as follows:

The Attorney General's Office feels that this bill is unconstitutional because it permits Worcester or Somerset County residents to take crabs by means of crab pots from the waters of respective counties, but prohibits other Maryland residents from taking crabs from such waters by means of crab pots. The constitutional guarantee of equal protection of the laws renders invalid statutes which effect an unlawful discrimination in favor of the inhabitants of a political subdivision or county as against other residents of the State.

[1965] Md. Laws 1686.

^[1965] Md. Laws 1686.

A syllogistic paradigm can be created in support of the provisions excluding corporations from the oyster fishery. The Supreme Court has found, despite vigorous dissents by Justices Black and Douglas, that corporations are "persons" within the meaning of the equal protection clause. ¹²⁷ But the Court has said that "[a] classification having some reasonable bases does not offend against that clause merely . . . because in practice it results in some inequality." And it is perhaps arguable that, since in an economic system corporations are repositories of greater amounts of capital and managerial talent, they represent a greater threat to depletion of the fishery than do individual takers and that, therefore, there is a reasonable basis for their exclusion. 129 This argument is analytically untenable since it is not the mere size or wealth of the particular economic unit engaged in oyster fishing which has caused depletion of the fishery, but is, rather, the peculiar practices of the fishery itself. Regulation which would control those practices in such a way that it would insure the replenishment of the fishery would not require the exclusion of corporations, or of any other type of economic unit, from the fishery; all participants would be subject to the remedial legislation. Thus the present prohibition of corporations from engaging in oyster fishing is not necessary to a termination of depletion. Moreover, it is uncertain that a discrimination against individuals because of their efficiency is "reasonable" enough to avoid being violative of the equal protection clause. And factually, this strawman falls when it is considered that, even if corporations are excluded, the number of economic units permitted to take oysters is so large that depletion will nevertheless continue unabated.

Those given to paradox might, moreover, point out that the reason given for holding the exclusion of corporations constitutional under the equal protection clause may be used to find this provision unconstitutional under the commerce clause. 130 Although in form the commerce clause is merely an allocation of power to Congress (i.e., "The Congress shall have Power . . . To regulate Commerce . . . among the several States . . ."), it has been judicially convoluted and used to strike down laws which burden commerce. It can certainly be argued that a state law which discriminates against corporations because of their economic efficiency creates such a burden.

The Supreme Court, however, has had difficulty in formulating a litmus test to be used in determining whether a state's commercial

^{127.} See Wheeling Steel Corp. v. Glander, 337 U.S. 562 (1949).
128. Lindsley v. Natural Carbonic Gas Co., 220 U.S. 61, 78 (1911).
129. Cf. Semler v. Oregon State Bd. of Dental Examiners, 294 U.S. 608, 611 (1965), where the Court in dicta noted with approval a Colorado decision that states have the authority to deny corporations the right to practice dentistry, insisting upon the personal obligations of individuals. Miller v. State Bd. of Dental Examiners, 90 Colo. 193, 8 P.2d 699, cert. denied, 287 U.S. 563 (1932). Of course, the basis for the discrimination against corporations in Miller—that a dentist practicing as an employee of a corporation would not feel as personally obligated to his patients as one who practices as an individual—does not support the discrimination against corporations contained in the oyster laws, where the existence or non-existence of some feeling of personal involvement on the part of the oysterman is irrelevant to the questions involved in retarding the depletion of oysters.

130. U.S. Const. art. I, § 8.

regulations are unconstitutionally burdensome. Mr. Chief Justice Stone attempted to do so in the following passage:

Although the commerce clause conferred on the national government power to regulate commerce, its possession of the power does not exclude all state power of regulation. Ever since Willson v. Black Bird Creek Marsh Co., and Cooley v. Board of Wardens, it has been recognized that, in the absence of conflicting legislation by Congress, there is a residuum of power in the state to make laws governing matters of local concern which nevertheless in some measure affect interstate commerce or even, to some extent, regulate it. Thus the states may regulate matters which, because of their number and diversity, may never be adequately dealt with by Congress. When the regulation of matters of local concern is local in character and effect, and its impact on the national commerce does not seriously interfere with its operation, and the consequent incentive to deal with them nationally is slight, such regulation has been generally held to be within state authority.131

But Chief Justice Stone also recognized the inadequacy of these principles and went on to say:

In the application of these principles some enactments may be found to be plainly within and others plainly without state power. But between these extremes lies the infinite variety of cases, in which regulation of local matters may also operate as a regulation of commerce, in which reconciliation of the conflicting claims of state and national power is to be attained only by some appraisal and accommodation of the competing demands of the state and national interests involved.¹³²

A series of cases have sought such a reconciliation with respect to wildlife. The Supreme Court in 1855 upheld a Maryland statute which regulated the gear to be used in the taking of oysters, ¹³³ in 1891 upheld a Massachusetts statute which regulated the taking of menhaden in Buzzard's Bay, ¹³⁴ in 1896 upheld a Connecticut statute which prohibited the shipment of certain game birds without the state, ¹³⁵ and in 1924 upheld a Louisiana statute which imposed a tax on all skins and hides taken within the state including those shipped out of state for manufacture. ¹³⁶ But in two 1928 decisions, the Supreme Court found Louisiana legislation, nominally dealing with processing of shrimp and oysters but covertly designed to force can-

^{131.} Southern Pac. Co. v. Arizona, 325 U.S. 761, 766-67 (1945) (citations omitted).

^{132.} Id. at 768-69.

^{133.} Smith v. Maryland, 59 U.S. (18 How.) 71 (1855).

^{134.} Manchester v. Massachusetts, 139 U.S. 240 (1891).

^{135.} Geer v. Connecticut, 161 U.S. 519 (1896).

^{136.} Lacoste v. Department of Conservation, 263 U.S. 545 (1924). All shipments of skins out of state were required to display a label showing payment of the severance tax.

ning industries located in Mississippi to move to Louisiana, a violation of the commerce clause. Likewise, in *Toomer v. Witsell*, decided in 1948, the Court found a South Carolina statute requiring shrimp boats to dock at South Carolina ports before transporting their catch to another state to be an unconstitutional burden on commerce. 138

From these cases, it does not appear that the Court has been inclined toward striking regulations as being violative of the commerce clause merely because they impose inefficient, artificial and rigid economic patterns on the fishery. If the Court were so inclined, not only the provisions excluding corporations but many of the gear restrictions and size and season limitations found in Maryland's oyster laws would be constitutionally suspect. Instead, the Supreme Court has used the commerce clause to strike wildlife regulations designed to discriminate in favor of the parochial economic interests of the industries and people of the particular state. Hence, the restrictions on entry precluding non-residents from the oyster fishery are also suspect under the commerce clause.

Notwithstanding all of the above, there is a doctrine which could be used to salvage Maryland's oyster laws. In the 1870's, a citizen of Maryland was convicted of violating a Virginia law which made it a crime for citizens of other states to plant or take oysters in Virginia waters. The Marylander contended that his conviction was in violation of the privileges and immunities clause, but in $McCready\ v$. $Virginia^{140}$ the Supreme Court affirmed the judgment and held that the right of Virginia citizens to plant and take oysters was not merely a privilege of citizenship but a prerogative of their collective ownership of the oysters as well. The Court explained the significance of this collective ownership with the following analogy:

The planting of oysters in the soil covered by water owned in common by the people of the State is not different in principle from that of planting corn upon dry land held in the same way. Both are for the purposes of cultivation and profit; and if the State, in the regulation of its public domain, can grant to its own citizens the exclusive use of dry lands, we see no reason why it may not do the same thing in respect to such as are covered by water. And as all concede that a State may grant to one of its citizens the exclusive use of a part of the common property, the conclusion would seem to follow, that it might by appropriate legislation confine the use of the whole to its own people alone. 141

^{137.} Foster-Fountain Packing Co. v. Haydel, 278 U.S. 1 (1928); Johnson v. Haydel, 278 U.S. 16 (1928). The shrimp legislation considered in Foster-Fountain made it unlawful to ship without the state any shrimp from which the heads and hulls had not been removed. The oyster legislation considered in Johnson contained similar provisions.

^{138. 334} U.S. 385, 403-06 (1948).

^{139.} The legislation challenged in the Foster-Fountain and Johnson decisions favored Louisiana processors. See note 139 supra and accompanying text.

^{140. 94} U.S. 391 (1876).

^{141.} Id. at 396.

State "ownership" has also been used to rationalize away other constitutional problems. In a 1914 decision, Patsone v. Pennsylvania, 142 Mr. Justice Holmes held that state ownership justified a prohibition against taking of wildlife by aliens, the equal protection clause notwithstanding. Likewise, it has been used to insulate state wildlife regulations from the strictures of the commerce clause. Geer v. Connecticut,148 decided in 1896, explained this exception as follows:

The power of the State to control the killing of and ownership in game being admitted, the commerce in game, which the state law permitted, was necessarily only internal commerce, since the restriction that it should not become the subject of external commerce went along with the grant and was a part of it. All ownership in game killed within the State came under this condition, which the State had lawful authority to impose, and no contracts made in relation to such property were exempt from the law of the State consenting that such contracts be made, provided only they were confined to internal and did not extend to external commerce.144

More recent decisions, however, cast serious doubt on the efficacy of the notion that Maryland's ownership of oysters and oyster beds saves its oyster laws from constitutional attack. In Toomer v. Witsell,145 the previously discussed South Carolina shrimp case, the Court rejected the notion that South Carolina's ownership of shrimp in its marginal waters saved its laws from attack under the privileges and immunities and commerce clauses. The Court said, "The whole ownership theory, in fact, is now generally regarded as but a fiction expressive in legal shorthand of the importance to the people that a State have power to preserve and regulate the exploitation of an important resource."146 Likewise, in the companion case of Takahashi v. Fish & Game Commission, 147 applying the equal protection clause, the Court said, "[W]e think that 'ownership' is inadequate to justify California in excluding any or all aliens who are lawful residents of the State from making a living by fishing in the ocean off its shores while permitting all others to do so."148

Although the Supreme Court has verbally minimized the significance of state ownership of natural resources, it has never formally overruled McCready v. Virginia and its postcursors. Instead, in Toomer the Court explicitly distinguished McCready. It pointed out two factual distinctions:

First, the McCready case related to fish which would remain in Virginia until removed by man. The present case, on the other

^{142. 232} U.S. 138 (1914). But see Missouri v. Holland, 252 U.S. 416, 434 (1920) (opinion of Holmes, J.): "To put the claim of the State upon title is to lean upon a slender reed.

^{143. 161} U.S. 519 (1896). 144. *Id.* at 532. 145. 334 U.S. 385 (1948). 146. *Id.* at 402. 147. 334 U.S. 410 (1948). 148. *Id.* at 421.

hand, deals with free-swimming fish which migrate through the waters of several states and are off the coast of South Carolina only temporarily. Secondly, the McCready case involved regulation of fishing in inland waters, whereas the statute now questioned is directed at regulation of shrimping in the marginal sea. 149

Despite this precedential deference, it is submitted that McCready is functionally dead. Its doctrine has lain dormant for fifty years; its distinguishment in Toomer seems legally and common-sensically invalid.

Moreover, in many respects this use of ownership to insulate state regulations from constitutional attack is but another way of verbalizing the now discredited "privilege not a right" distinction. The Supreme Court has made clear that it will no longer countenance the imposition of conditions or qualifications upon governmental privileges if they tend to inhibit constitutionally protected activities. 150 An example of an effort to impose such a condition can be found in the California case of Danskin v. San Diego Unified School District. 151 In Danskin, the Supreme Court of California held that the use of a school auditorium could not be denied to an individual because he refused to take a loyalty oath. Speaking for the court, Mr. Justice Traynor said, "A state is without power to impose an unconstitutional requirement as a condition for granting a privilege even though the privilege is the use of state property."152

Finally, at the 1969 term the Supreme Court indicated a renewed willingness to strike down discrimination against non-residents. In Shapiro v. Thompson, 153 the Court held unconstitutional as a denial of equal protection Connecticut, District of Columbia, and Pennsylvania statutes which denied welfare assistance to people who had not resided within the District of Columbia or the state for at least one year. A holding which precludes a state from discriminating in the application of its own funds which are certainly as much the property of the state as were Virginia's oysters, goes far toward dispelling the notion that state ownership can function as an excuse for invidious discrimination. Based upon all of the foregoing, it appears that

McCready is a constitutional dodo.

IV. REFORM

Legally imposed cultural deprivations preclude development of the full oyster-producing potential of the Maryland fishery. These

^{149. 334} U.S. 385, 401 (1948).
150. Sherbert v. Verner, 374 U.S. 398, 404 n.6 (1962). See Reich, The New Property, 73 YALE L.J. 731, 739-46 (1964).
151. 28 Cal. 2d 536, 171 P.2d 885 (1946).
152. 171 P.2d at 891.
153. 394 U.S. 618 (1969). Shapiro can also be regarded as a direct attack on the constitutionality of Maryland oyster laws. In broadest terms, Shapiro was bottomed on the concept of a right to interstate travel. This right, coupled with the basic purpose of the commerce clause (the United States should be a single commercial unit), can be viewed as giving fishermen a right to take their catch throughout the navigable waters of the nation, subject to the regulations designed to promote safety and conservation but free from regulations designed to promote parochial interests. and conservation but free from regulations designed to promote parochial interests.

legal strictures can be described in terms of cause and effect. The laws which, in effect, mandate public oyster grounds created the basic economic problem — exploitation. But the laws which were subsequently enacted, nominally to prevent this exploitation, created a problem of perhaps equal magnitude — a patchwork which mandates inefficiencies and protects parochial interests without significantly protecting

the physical yield of the fishery.

Fundamental to improved management of the oyster fishery is liberalization in the techniques through which individuals can obtain private rights in oyster beds. A legislative mandate that all oyster bottom be divided among private parcels surely would increase the total economic yield of the fishery and the profits of those holding exclusive rights to such parcels and would decrease the cost of oysters to the consumer. It would also dispense with the need for laws restricting gear, size of oyster, and length of season. But change to a completely private oyster fishery would not resolve all of the problems. Ovster beds would still be vulnerable to pollution and siltation. Moreover, the advantages of a private oyster fishery relate only to economic efficiency. There are other societal values. The capital and innovation which would follow change to a private oyster industry would almost certainly force the traditional oysterman out of business. With him would disappear most of the skipjacks, the classic bay vessels. Hence, the change would result in both short run economic dislocation in tidewater areas and the eventual destruction of the picturesque traditional oyster trade. In addition, if changes in the law merely took the form of permitting extensive private leasing of bottom, they might create what will prove to be a new set of anachronisms. For example, in Japan oyster production has been dramatically increased through the use of a raft culture in which oysters grow not on the bottom but on ropes suspended from rafts thereby both taking maximum advantage of available water, oxygen and food, and avoiding predators. 154 Although there is no guarantee that a raft culture would prove feasible in Chesapeake Bay, its use elsewhere illustrates the disadvantage of being in the statutory lock-step of any particular oyster-taking technology.

On the basis of the foregoing, it is submitted that drastic surgery is indicated — the detailed provisions found in Maryland's "oyster code" which restrict entry and control depletion should be repealed. In their stead the Fish and Wildlife Administration should be delegated broad authority to manage the oyster fishery. A switch from detail to delegation has a variety of advantages. Generally, it would give the Administration the range of choice necessary for effective management, free from the fetters of anachronistic laws and the cumbersomeness of the legislative process. Specifically, it would permit the Administration to determine the preferred mix between public and private oyster grounds. While it is certainly envisioned that the Department would take advantage of the economic efficiencies implicit in restricting entry to the fishery, the Administration could ease the

transition for present oystermen, could consider impositions of limitations on entry other than through leases or outright transfers to private parties, and might preserve some portions of the oyster bottom as a public ground to serve as a functioning oyster museum. The Administration would have the authority to negotiate mutually advantageous trade-offs with its counterpart in Virginia: Maryland could exchange a portion of its productive bottom for access to Virginia's superior supply of seed oysters. It would also provide a mechanism through which existing laws could be rid of their pervasive parochialism but, coincidentally, could permit fair representation of the interests of watermen through notice, hearing and appeal provisions. Most importantly, the Department would have the authority to respond to changing circumstance, be it pestilence or raft culture