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# DOUGLAS v. SEACOAST PRODUCTS, INC.: THE LEGAL AND ECONOMIC CONSEQUENCES FOR THE MARYLAND OYSTERY\*

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#### Introduction

While the management of the oyster resources of the Chesapeake Bay has been the subject of great volumes of research,¹ little attention has been focused on the relationship between the mobility of watermen and the success of those management practices. The mobility of Chesapeake Bay watermen is presently restricted by state residency requirements in both Maryland and Virginia, which reduce the number of oystermen in each state and help protect the resource from overharvesting. Furthermore, these entry restrictions allow each state to manage its oyster fishery independently and exclusively, although this practice may not promote the greatest productivity for the Chesapeake Bay as a whole.

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<sup>1.</sup> See, e.g., Alford, The Role of Management in Chesapeake Oyster Production, 63 Geographical Rev. 44 (1973); Power, More About Oysters Than You Wanted to Know, 30 Md. L. Rev. 199 (1970) [hereinafter cited as Power, More About Oysters]; F. Christy, Jr., The Exploitation of a Common Property Natural Resource: The Maryland Oyster Industry (1964) (unpublished University of Michigan Ph.D. dissertation available from University Microfilms, Inc., Ann Arbor, Mich.).

Recent decisions of the Supreme Court, in particular, Douglas v. Seacoast Products, Inc.,<sup>2</sup> portend a substantial possibility that Maryland watermen will ultimately be permitted to harvest oysters in Virginia waters and Virginia watermen will gain access to Maryland waters. Thus, it is particularly important to assess the role of watermen mobility and restraints on mobility in the management of the oyster fisheries on the Chesapeake Bay at this time. This article will first examine the legality of Maryland's residency requirements for oyster licensees in light of these decisions, and will then attempt to assess the probable consequences of the interstate mobility that will almost certainly result from them. The probable impact of Douglas and other recent Supreme Court decisions will be examined through analysis of the economic consequences of an analogous decision in which the Maryland Court of Appeals struck down county residency requirements for Maryland watermen.

## The Future of State Residency Requirements for Chesapeake Bay Oystermen

Maryland law provides that "[a]ny resident of the state may catch oysters or clams on any area in the waters of the state from which catching oysters or clams is permitted under the provisions of this subtitle." This restriction is enforced by the requirement that a person obtain a license before engaging in commercial oyster harvesting and, because a license may only be obtained by a person who has been a resident of Maryland for the preceding twelve months, the practical consequence of these provisions is that watermen who are new residents of Maryland or who reside in Virginia are prevented from harvesting oysters from public oyster bars in Maryland.

The twelve month waiting period for new Maryland residents would almost certainly be found to be an unconstitutional burden on the fundamental right to travel if this requirement were challenged in the courts.<sup>6</sup> A more difficult legal question, however, is presented

<sup>2. 431</sup> U.S. 265 (1977). Other relevant decisions include City of Philadelphia v. New Jersey, 98 S. Ct. 2531 (1978); Hicklin v. Orbeck, 98 S. Ct. 2482 (1978).

<sup>3.</sup> Md. Nat. Res. Code Ann. § 4-1003 (1974). The states of Maryland and Virginia have agreed to share access to the Potomac River oyster beds to the exclusion of any other state's citizens. *Id.* § 4-306 (1974 & Cum. Supp. 1977) (Potomac River Compact of 1958).

<sup>4.</sup> Md. Nat. Res. Code Ann. § 4-1004(b) (1977).

Id.

<sup>6.</sup> Durational residency requirements discriminate against new residents while favoring older residents. There is seldom a reasonable basis for such discrimination,

by the outright exclusion of nonresident watermen. While this restriction will remain in effect until repealed by the General Assembly or invalidated by a court, the Supreme Court's ruling in *Douglas* strongly suggests that federally licensed vessels from other states will eventually join Maryland's commercial oyster fleet.

The conflict presented in *Douglas* arose when the Commissioner of Virginia Marine Resources refused to issue a license to a subsidiary of Seacoast Products, Inc., which would have allowed the company to catch menhaden in Virginia's territorial waters. His refusal was based upon a Virginia law which made the nonresident company ineligible for a commercial fishing license. The Virginia Code prohibited persons other than Virginia residents from fishing for menhaden in the Virginia portion of the Chesapeake Bay. However, nonresident corporations were eligible for menhaden licenses allowing them to fish in the three mile wide marginal sea along Virginia's eastern coast if United States citizens owned and controlled at least seventy-five percent of the corporation's stock.

Seacoast Products was incorporated in Delaware, maintained its principal offices in New Jersey, and was qualified to do business in Virginia. In 1973 Seacoast was sold to Hanson Trust, Ltd., a British company, whose stock was held almost entirely by aliens. Because Seacoast was no longer owned by United States citizens, it was prohibited under Virginia law from fishing for menhaden in the bay as well as in the marginal sea.

After the denial of its license application, Seacoast filed a complaint in the Federal District Court for the Eastern District of Virginia challenging the constitutionality of the Virginia statutes. Seacoast Products, Inc. v. Douglas, 11 was heard by a three-judge panel which struck down the challenged statutes, reasoning that the citizenship requirement was preempted by a federal statute and that the residency restriction violated the fourteenth amendment. 12 The

which discourages individuals from exercising the fundamental right to travel; "the right of interstate travel must be seen as insuring new residents the same right to vital government benefits and privileges in the States to which they migrate as are enjoyed by other residents." Memorial Hospital v. Maricopa County, 415 U.S. 250, 261 (1974). See also Shapiro v. Thompson, 387 F. Supp. 373 (D. Me. 1974); Hicklin v. Orbeck, 565 P.2d 159, 162-65 (Alaska 1977), rev'd on other grounds, 98 S. Ct. 2482 (1978).

<sup>7.</sup> VA. CODE § 28.1-60(1), -60(2) (1950) (repealed 1978).

<sup>8.</sup> VA. CODE § 28.1-81.1 (1976) (repealed 1978).

<sup>9. 431</sup> U.S. at 269-70.

<sup>10.</sup> *Id*.

<sup>11.</sup> Civil Action No. 75-69-NN (E.D. Va. Nov. 7, 1975) (unreported).

<sup>12.</sup> Id. at 2.

three-judge court agreed with Seacoast's contention that "since the licenses are granted to Virginia domestic and resident corporations but refused nonresident corporations, there is discrimination in contravention of the fourteenth amendment assurance of equal protection of the laws,"13 relying principally upon the Supreme Court's decision in Takahashi v. Fish and Game Commission<sup>14</sup> which held that the fourteenth amendment was violated by a state's refusal to issue a commercial fishing license to a lawfully resident alien. A second basis for the lower court's decision in Douglas was that Virginia laws regulating the citizenship of fishermen in state waters were preempted by the Bartlett Act,15 which provided a regulatory scheme for controlling fishing activities of foreign vessels while in the territorial waters of the United States. The court stated that, in its judgment, "this legislation preempted Virginia's control of commercial sea fisheries and superseded the State's regulation of them" and that "prevention of incursions by foreigners is the responsibility exclusively of the Federal government."16

The state of Virginia appealed that ruling to the Supreme Court which affirmed the decision on another ground.<sup>17</sup> The Court stated that it was unnecessary to reach the constitutional questions raised by the parties,<sup>18</sup> because it found that the Virginia statutes were preempted by federal vessel enrollment and licensing laws.<sup>19</sup> The Court ruled that:

<sup>13.</sup> Id. at 4.

<sup>14. 334</sup> U.S. 410 rehearing denied, 335 U.S. 837 (1948). The Seacoast court also noted that the Supreme Court in Takahashi and in Toomer v. Witsell, 334 U.S. 385 (1978), declined to treat its earlier decision in McCready v. Virginia, 94 U.S. 391 (1876), as authority for allowing state discrimination in fishery laws. In the McCready case, decided over a century ago, the Court upheld a state law prohibiting persons other than Virginia citizens from planting oysters in Virginia waters.

<sup>15. 16</sup> U.S.C. § 1081 (1970) (repealed 1976).

<sup>16.</sup> Seacoast Products, Inc. v. Douglas, Civil Action No. 75-69-NN at 5-6 (E.D. Va. Nov. 7, 1975).

<sup>17. 431</sup> U.S. 265 (1977).

<sup>18.</sup> Id. at 272. The Court stated that although the preemption claim was basically constitutional in nature, deriving its force from the supremacy clause, it is tested as "statutory" for purposes of deciding statutory claims first to avoid unnecessary constitutional adjudication. Id. While a preemption question might be characterized as a constitutional question since it involves the application of the supremacy clause to an apparent conflict of federal and state law, the focus of the Douglas decision was the construction and effect of federal vessel licensing laws.

<sup>19.</sup> Such laws provide that:

Vessels engaged in domestic or coastwise trade or used for fishing are "enrolled" under procedures established by the Enrollment and Licensing Act of Feb. 18, 1793, 1 Stat. 305, codified in 46 U.S.C. §12. "The purpose of an

Insofar as these state laws subject federally licensed vessels owned by nonresidents or aliens to restrictions different from those applicable to Virginia residents and American citizens, they must fall under the Supremacy Clause. As we have noted above, however, reasonable and evenhanded conservation measures, so essential to the preservation of our vital marine sources of food supply, stand unaffected by our decision.<sup>20</sup>

Because Seacoast's vessels had been properly enrolled and were licensed under federal law to catch any type of fish, the Court concluded that they had been granted the right to fish in Virginia waters on the same terms as Virginia residents.<sup>21</sup> In so ruling, the Douglas Court added one more chapter to the historical debate over the intended effect of the Enrollment and Licensing Act, which was first enacted in 1793.22 Its opinion recognized that commentators from Thomas Jefferson to Felix Frankfurter have criticized the view that federal vessel licenses granted rights to coastal trade and fishing which could not be abrogated by the states.23 The Court refused to construe federal enrollment and licensing laws as merely a means of providing evidence of the national character of American vessels, however, because it viewed the landmark case of Gibbons v. Ogden,24 decided thirty years after the passage of the Licensing Act. as persuasive authority for the proposition that the federal statute was intended to confer authority upon enrolled vessels to "carry on" the activity for which they are licensed.

In Gibbons the Court had ruled that a New York statute creating a steamboat monopoly in New York waters was preempted by the federal laws under which a would-be competitor had enrolled and licensed his vessel. Because Gibbons' steamboat was federally licensed to engage in the coasting trade, the Court held that the license not only identified the national character of the vessel, but also conveyed the right to transport passengers and freight in

enrollment is to evidence the national character of a vessel . . . and to enable such vessel to procure a . . . license." *The Mohawk*, [70 U.S. (3 Wall.) 566, 571 (1866)]; *Anderson v. Pacific Coast S.S. Co.*, [255 U.S. 187, 199 (1912)].

A "license," in turn, regulates the use to which a vessel may be put and is intended to prevent fraud on the revenue of the United States. See 46 U.S.C. §§ 262, 263, 319, 325 . . .; 46 CFR § 67.01-13 (1976). The form of a license is statutorily mandated . . . .

Douglas v. Seacoast Products, Inc., 431 U.S. at 273.

<sup>20. 431</sup> U.S. at 286-87.

<sup>21.</sup> Id. at 281.

<sup>22.</sup> Act of Feb. 18, 1973, 1 Stat. 305 (1850).

<sup>23. 431</sup> U.S. at 278-79 nn.13 & 15.

<sup>24. 22</sup> U.S. (9 Wheat.) 1 (1824).

coastal waters free from state-created monopolies.<sup>25</sup> The Court in *Douglas*, by analogy, reasoned that because Seacoast held federal licenses "to carry on" a mackeral fishery which, pursuant to statute, authorized "the taking of fish of every description,"<sup>26</sup> it not only identified the enterprise pursued but also authorized Seacoast to carry on that enterprise:

And just as *Gibbons* and its progeny found a grant of the right to trade in a State without discrimination, we conclude that [Seacoast's vessels] have been granted the right to fish in Virginia waters on the same terms as Virginia residents.<sup>27</sup>

The holding in *Douglas* strongly suggests that a federal vessel license entitles a nonresident to harvest oysters as well as finfish in Maryland on the same terms as residents. The license under scrutiny in *Douglas* authorized "the taking of fish of every description, including shellfish,"<sup>28</sup> and the absence of limiting or qualifying language in the Court's opinion will make it very difficult for a court to find a basis for treating state residency requirements for oystering more favorably than the Virginia menhaden laws which were invalidated. The Court's narrow approach, motivated by its traditional preference for avoiding "unnecessary" constitutional questions, suggests a result which conflicts with its earlier decision in *McCready v. Virginia*.<sup>29</sup> In grounding its holding on preemption by a federal statute rather than the Constitution, the Court provides little guidance as to constitutional limitations on state fishery discriminations which do not involve federal licenses.<sup>30</sup>

As if it were uneasy with the narrow rationale for the result, the majority in *Douglas* declared in dicta, that its decision was supported by policy considerations of federalism which required that interstate commerce in coastal fisheries not be burdened by local discriminations based on claims of title or ownership asserted by the states.<sup>31</sup> Justice Rehnquist, joined by Justice Powell in a separate

<sup>25.</sup> Id. at 212-14.

<sup>26. 46</sup> U.S.C. § 263 (1976).

<sup>27. 431</sup> U.S. at 281.

<sup>28. 46</sup> U.S.C. § 263 (1976) (emphasis added).

<sup>29. 94</sup> U.S. 391 (1876).

<sup>30.</sup> Vessels which displace less than five tons (including many traditional Chesapeake Bay workboats) are not eligible for federal licenses. 46 C.F.R. § 67.07-13(a). Whether these vessels and their owners may be excluded by state residency requirements cannot be determined by the theory relied upon in the *Douglas* opinion.

<sup>31. 431</sup> U.S. at 284-87.

opinion, concurred in the holding that federal licensees were granted the right to fish in coastal waters on the same terms as any other fisherman,<sup>32</sup> but protested the failure of the majority to recognize the substantiality of the state interests at stake:

[T]he States have a substantial proprietary interest — sometimes described as "common ownership," Geer v. Connecticut, 161 U.S. 519, 529 (1896) — in the fish and game within their boundaries. This is worthy of mention not because it is inconsistent with anything contained in the Court's opinion, but because I am not sure that the States' substantial regulatory interests are given adequate shrift by a single sentence casting the issue of state regulation as "simply whether the State has exercised its police power in conformity with the federal laws and Constitution." 33

The principal remaining source of legal support for a state's exclusion of nonresidents from its oyster fishery is the *McCready* case, decided in 1876.<sup>34</sup> McCready was a Maryland waterman who was convicted under a Virginia law prohibiting a nonresident from planting or taking oysters in Virginia waters. He appealed the conviction to the Supreme Court, contending both that the law violated the privileges and immunities clause, and that it unlawfully interfered with interstate commerce.<sup>35</sup> The latter argument was summarily dismissed by the Court, which stated that the planting and harvesting of oysters was not an aspect of commerce and that no issue involving interstate commerce was raised.<sup>36</sup> This commerce clause analysis, however, has since been discredited, as the majority opinion in *Douglas* notes.<sup>37</sup>

<sup>32.</sup> Id. at 287.

<sup>33.</sup> Id. at 287-88 (Rehnquist & Powell, J.J., concurring) (quoting id. at 284-85).

<sup>34.</sup> Justice Rehnquist cited *McCready* as one of several cases "consistent in recognizing that the retained interests of States in such common resources as fish and game are of substantial legal moment, whether or not they rise to the level of a traditional property right." *Id.* at 288.

<sup>35. 94</sup> U.S. at 392-94.

<sup>36.</sup> Id. at 396-97.

<sup>37.</sup> While appellant may be correct in arguing that at earlier times in our history, there was some doubt whether Congress had power under the commerce clause to regulate the taking of fish in state waters, 16 there can be no question today that such power exists where there is some effect on interstate commerce. Perez v. United States, 402 U.S. 146 (1971); Heart of Atlanta Motel v. United States, 379 U.S. 241 (1964); Wickard v. Filburn, 317 U.S. 111 (1942).

Douglas v. Seacoast Products, Inc., 431 U.S. 265, 281-82 (1977). In its footnote 16, the Court cited McCready v. Virginia, 94 U.S. 391, 395 (1877). 431 U.S. at 281.

The tension between *McCready* and *Douglas* runs deeper than a difference as to whether the taking of fish in state waters is a part of interstate commerce. Indeed, McCready had raised, without success, an argument nearly identical to that which prevailed in *Douglas*, contending that the state law restricting the shipment by nonresidents of oysters into Virginia for cultivation was "in conflict with . . . the laws of the United States relating to the coast trade." Statements in *Douglas* to the effect that fishing in coastal waters is a part of interstate commerce and that federal vessel licenses grant rights preemptive of state discriminations against nonresidents were therefore tantamount to a *sub silentio* overruling of the interstate commerce-federal preemption element of *McCready*.

McCready's principal argument was that the exclusionary law violated the privileges and immunities clause of article IV of the Constitution. The clause had been interpreted three years earlier in *The Slaughter House Cases*:

Its sole purpose was to declare to the several States, that whatever those rights, as you grant or establish them to your own citizens, or as you limit or qualify, or impose restrictions on their exercise, the same, neither more nor less, shall be the measure of the rights of citizens of other States within your jurisdiction.<sup>39</sup>

That argument did not prevail, however, as the Court held that oyster beds were the common property of the commonwealth of Virginia and that these rights of ownership were not affected by the privileges and immunities clause.<sup>40</sup> Therefore, the Court concluded that the state could properly confine the use and enjoyment of the resource to its own citizens:

[W]e think we may safely hold that the citizens of one State are not invested by this clause of the Constitution with any interest in the common property of the citizens of another State.<sup>41</sup>

The McCready opinion must be read as a determination that the federal interests reflected in the privileges and immunities clause

<sup>38. 94</sup> U.S. at 394.

<sup>39. 83</sup> U.S. (16 Wall.) 36, 77 (1873). The privileges and immunities clause provides that "[t]he Citizens of each State shall be entitled to all Privileges and Immunities of Citizens in the several States." U.S. Const. art. IV, § 2, cl. 1.

<sup>40. 94</sup> U.S. at 395-96.

<sup>41. 94</sup> U.S. at 395. The Court's "ownership" theory was derived in large part from the case of Corfield v. Coryell, 6 F. Cas. 546 (C.C.E.D. Pa. 1823) (No. 3230).

were not of sufficient consequence to warrant the invalidation of a state law preferring state residents in the disposition of an important state resource. The commonwealth of Virginia attempted to convince the *Douglas* Court that the same rationale should apply where federal interests in interstate commerce collide with the state's interest in allocating its menhaden resources exclusively to state residents. In its rejection of that argument, the Court revealed the considerable erosion in the "state ownership" doctrine in the cases subsequent to *McCready*:

The "ownership" language of cases such as those cited by Virginia must be understood as no more than a 19th century legal fiction expressing "the importance to its people that a state have power to preserve and regulate the exploitation of an important resource." Toomer v. Witsell, 334 U.S. 385, 402 (1948); see also Takahaski v. Fish and Game Commission, 334 U.S. 410, 420-421 (1948) under modern analysis, the question is simply whether the State has exercised its police power in conformity with the federal laws and Constitution. As we have demonstrated above, Virginia has failed to do so here.<sup>42</sup>

The Douglas Court also rejected an "ownership" argument based upon the Submerged Lands Act.<sup>43</sup> While recognizing that the Act "does give the States 'title,' 'ownership,' and the 'right and power to manage, administer, lease, develop, and use' the lands beneath the oceans and natural resources in the waters within state territorial jurisdiction," the Court observed, nonetheless, that the Act reserved for the United States all constitutional powers of regulation and control for commerce and other purposes.<sup>44</sup> Thus, whatever interest a state may claim in migratory finfish in its navigable waters, it is not, on the Court's analysis, sufficient to permit the exclusion of nonresident fishermen whose vessels are licensed under an act of Congress.

It would appear that, in the wake of the *Douglas* decision, the "state ownership" theory has lost most of its vitality.<sup>45</sup> *Douglas* 

<sup>42. 431</sup> U.S. at 284-85.

<sup>43. 43</sup> U.S.C. § 1314(a) (1970).

<sup>44. 431</sup> U.S. at 284-85.

<sup>45.</sup> Note that the *McCready* case has not been expressly overruled, and the Maryland Court of Appeals has declined an invitation to disregard it. In Bruce v. Director, 261 Md. 585, 607-11, 276 A.2d 200, 211-13 (1971), the Maryland court noted that while the validity of the state residency requirement was not in issue, it considered that *McCready* retained sufficient authority to sustain those requirements. 261 Md. at 607-11, 276 A.2d at 211-13.

seems to establish that the state ownership theory no longer has legal significance apart from conventional constitutional analysis in determining whether the state has exercised its police power in conformity with the federal laws and Constitution.<sup>46</sup> Ultimately, therefore, the actions of a state in controlling access to its oyster fishery by persons other than federal licensees must be examined to determine whether protected privileges and immunities of nonresidents are unlawfully denied, whether residency classifications violate the equal protection clause, whether an unlawful interference with interstate commerce is created, and whether a valid federal law preempts the attempted restriction. Legal analysis under each of these theories may properly take into consideration legitimate state interests.<sup>47</sup>

In Baldwin v. Fish and Game Commission, 48 a case decided after Douglas, the Supreme Court has shed some light on the likelihood of a successful attack on the Maryland residency requirement under the privileges and immunities clause. Baldwin reinforced the proposition in McCready that a state's disposition of its common property resources need not be affected by the privileges and immunities clause. The case involved a constitutional challenge to Montana laws which required nonresidents to pay twenty-five times as much as residents were charged for a license to hunt elk. The plaintiffs, hunting guides and nonresident elk hunters, claimed that the discriminatory license fees violated both the privileges and immunities clause and the fourteenth amendment's equal protection clause. 49

In examining the plaintiffs' privileges and immunities argument, the Court stated:

Some distinctions between residents and nonresidents merely reflect the fact that this is a Nation composed of individual States, and are permitted; other distinctions are prohibited because they hinder the formation, the purpose, or the development of a single union of those States. Only with respect to those "privileges" and "immunities" bearing upon the vitality of the Nation as a single entity must the State treat all citizens, resident and nonresident, equally.<sup>50</sup>

<sup>46. 431</sup> U.S. at 284-85.

<sup>47.</sup> Justice Rehnquist, in *Douglas*, acknowledged the continuing relevance of legitimate state interests. 431 U.S. at 287-88 (Rehnquist, J., concurring in part and dissenting in part).

<sup>48. 98</sup> S. Ct. 1852 (1978).

<sup>49.</sup> Id. at 1854-55.

<sup>50.</sup> Id. at 1860.

The Court weighed the respective state and federal interests in recreational hunting for elk in Montana, concluded that "[e]quality in access to Montana elk is not basic to the maintenance or wellbeing of the Union,"<sup>51</sup> and dismissed the hunters' privileges and immunities claim:

Appellants do not — and cannot — contend that they are deprived of a means of a livelihood by the system or of access to any part of the State to which they may seek to travel. We do not decide the full range of activities that are sufficiently basic to the livelihood of the Nation that the States may not interfere with a nonresident's participation therein without similarly interfering with a resident's participation. Whatever rights or activities may be "fundamental" under the Privileges and Immunities Clause, we are persuaded, and hold, that elk hunting by nonresidents in Montana is not one of them.<sup>52</sup>

Thus, it is clear that state ownership remains an important consideration under modern privileges and immunities clause analysis, despite the language in *Douglas* which denigrated the "state ownership" talisman. According to *Baldwin*, "the fact that the State's control over wildlife is not exclusive and absolute in the face of federal regulation and certain federally protected interests does not compel the conclusion that it is meaningless in their absence."<sup>53</sup>

In decisions interpreting the equal protection clause, legislative classifications have been upheld on the basis of local economic interests such as a "State's legitimate interest in encouraging employment,"<sup>54</sup> a typical argument made in favor of restricting access to a state's fisheries. Where neither a fundamental interest nor an invidious discrimination is involved, the courts traditionally allow the states great flexibility in the regulation of local economic matters. The Supreme Court has stated that "when local economic regulation is challenged solely as violating the equal protection clause, this Court consistently defers to legislative determinations as

<sup>51.</sup> Id. at 1862.

<sup>52.</sup> Id.

<sup>53.</sup> Id. at 1861.

<sup>54.</sup> Dandridge v. Williams, 397 U.S. 471, 486 (1970). It should be noted, however, that a state's power to bias employment opportunities in favor of its own residents is subject to limitation under the privileges and immunities clause of art. IV, § 2. See, e.g., Hicklin v. Orbeck, 98 S. Ct. 2482, 2488-92 (1978); Toomer v. Witsell, 334 U.S. 385, 395-403 (1948).

to the desirability of particular statutory discriminations."<sup>55</sup> Classifications based on residency, unlike those based on race or alienage, have not been determined to be so invidious that justification must be found in a compelling state interest. A simple residency requirement, unlike a duration residency requirement, does not restrain the fundamental right of interstate migration. A colorable argument can therefore be made that Maryland's residency requirement for oystering does not violate the equal protection clause of the fourteenth amendment, because it does not impinge upon a fundamental right and can be justified as a rational means of protecting various state interests.

Even the commerce clause, with its implicit prohibition of unreasonable state-created impediments to interstate commerce, will tolerate some state laws which affect commerce but which are important to the health and welfare of residents of the state. As the Court in *Douglas* noted,<sup>59</sup> holders of federal vessel licenses moving in interstate commerce may be required to comply with state laws enacted for the conservation of fishery resources, such as gear restrictions for oystering or restrictions for the abatement of pollution.

Because legitimate local interests can be recognized by the courts in determining whether a state residency discrimination violates one of these constitutional provisions, attention must be focused on the nature of Maryland's interest in limiting oyster licenses to residents. Two interests emerge as the principal justification for the discrimination: the state's proprietary claims to the oyster beds, and the state's interest in the economic welfare of its residents.

A plausible argument can be made that fixed, local resources of a state — those which, unlike migratory birds or fish, are capable of being controlled or possessed in the conventional sense — are part of the wealth of the state which it can and must manage for the general

<sup>55.</sup> New Orleans v. Dukes, 427 U.S. 297, 303 (1976).

<sup>56.</sup> Arlington County Board v. Richards, 434 U.S. 5, rehearing denied, 434 U.S. 976 (1977). "The Constitution does not . . . presume distinctions between residents and non-residents of a local neighborhood to be invidious." Id. at 7.

<sup>57.</sup> Hicklin v. Orbeck, 565 P.2d 159, 166 (Alaska 1977), rev'd. on other grounds, 98 S. Ct. 2482 (1978); McCarthy v. Philadelphia Civil Service Comm'n, 424 U.S. 645, 646-47 (1976).

<sup>58.</sup> See, e.g., Dandridge v. Williams, 397 U.S. at 486: "[T]he Fourteenth Amendment gives the federal courts no power to impose upon the States their views of what constitutes wise economic or social policy." See also Baldwin v. Fish and Game Comm'n, 98 S. Ct. 1852, 1863-64 (1978).

<sup>59. 431</sup> U.S. at 277.

welfare of its residents. On occasion, courts have found this rationale to be an adequate justification for state residency discriminations when challenged under both the privileges and immunities clause and the equal protection clause. 60 In addition, the distinction between fixed or "sedentary" fish resources and those which are mobile is recognized as a matter of international law. 61 In the resolution of disputes among nations competing in the coastal fisheries, it is now generally accepted that a government may appropriately claim the exclusive right to control the harvest of sedentary resources such as shellfish, but not the highly mobile fish species. 62 A state's claim of a proprietary interest in its shellfish beds does not strain the traditional concept of property and cannot be dismissed as merely an archaic legal fiction, as claims to migratory birds and fish have been dismissed. 63 Although Douglas casts doubt on the vitality of the state ownership doctrine, 64 that decision dealt solely with access to a highly mobile finfish.

The Court has also recognized, in *McCready*, that a fixed resource such as an oyster bed can be conserved and cultivated to yield a greater harvest if a state's proprietary interests are recognized and preserved.<sup>65</sup> A state such as Maryland might contend that its oyster management program has created, in effect, a statewide oyster "farm" which is partially subsidized out of general

<sup>60.</sup> See, e.g., Baldwin v. Fish and Game Comm'n, 98 S. Ct. at 1862; State v. Norton, 335 A.2d 607 (Me. 1975).

<sup>61.</sup> Comment, Alaska's Regulation of King Crab on the Outer Continental Shelf, 6 U.C.L.A.-Alas. L. Rev. 375, 379-86 (1977).

<sup>62.</sup> See, e.g., Fishery Conservation and Management Act of 1976, 16 U.S.C. §§ 1802(4), (14) (1976).

<sup>63.</sup> See, e.g., Douglas v. Seacoast Products, Inc., 431 U.S. at 284; Toomer v. Witsell. 334 U.S. at 402; Missouri v. Holland. 252 U.S. 416, 434 (1920).

<sup>64.</sup> A state does not stand in the same position as the owner of a private game preserve and it is pure fantasy to talk of "owning" wild fish, birds, or animals. Neither the States nor the Federal Government, any more than a hopeful fisherman or hunter, has title to these creatures until they are reduced to possession by skillful capture.

<sup>431</sup> U.S. at 284.

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.

<sup>94</sup> U.S. at 396 (dictum).

state revenues.<sup>66</sup> If nonresidents were allowed to invade Maryland's oyster bars, the state would no longer have a significant incentive to manage the resource as it does at present.<sup>67</sup>

Conservation of Maryland's oyster resource requires some type of limitation on harvesting effort. Restricting gear types imposes an obvious inefficiency on the efforts of the waterman, and may increase the physical hardship of the labor.68 In order to control resident and nonresident fishing effort, daily or seasonal limits might have to be so drastically reduced that no individual waterman could harvest enough oysters to earn a living.69 Thus, a limit on the total number of oystermen, rather than the utilization of various means of limiting the harvest alone, may be very important for purposes of conservation. It can therefore be argued that the combination of conservation interests and "the State's legitimate interest in encouraging employment" justifies the restriction of the limited employment opportunities in Maryland's oyster fishery to state residents. 70 As Justice Frankfurter once said, "[i]t is not conceivable that the framers of the Constitution meant to obliterate all special relations between a State and its citizens."71

These arguments, though persuasive in themselves, are not likely to prevail when balanced against federal interests in a free interstate market unconstrained by local economic prejudices. The exclusion of nonresidents is not essential for the protection of a state's property in oysters. Other types of fixed natural resources owned by a state, such as standing timber, farmland, oil, gas and other minerals on state lands, are typically developed by renting the

<sup>66.</sup> In Toomer v. Witsell the Court indicated that a state has the power "to charge nonresidents a differential which would merely compensate the State for any conservation expenditures from taxes which only residents pay." 334 U.S. at 399. Whether this justification for treating nonresidents differently from residents could be extended to the exclusion of nonresidents presents a more difficult question.

<sup>67.</sup> This rationale was used by a federal district court in upholding Montana laws imposing discriminatory license fees on nonresident elk hunters in Montana Outfitters Action Group v. Fish and Game Comm'n, 417 F. Supp. 1005, 1010 (D. Mont. 1976), aff'd. sub nom. Baldwin v. Fish and Game Comm'n, 98 S. Ct. 1852 (1978). "[A] legislature might, with some rationality conclude that a pure lottery open to all potential elk hunters in the United States might destroy the political motivation to Montana citizens to underwrite the elk management program in the absence of which the species would disappear." See also, Note, Montana Outfitters v. Fish and Game Commission: Of Elk and Equal Protection, 38 Mont. L. Rev. 387 (1977).

<sup>68.</sup> See, e.g., Handscraping: Too Strenuous, 33 POTOMAC BASIN REP. No. 11 (Nov. 1977).

<sup>69.</sup> State v. Norton, 335 A.2d 607, 614 (Me. 1975).

<sup>70.</sup> Dandridge v. Williams, 397 U.S. at 486. See also Hicklin v. Orbeck, 565 P.2d 159 (Alaska 1977), rev'd, 98 S. Ct. 2482 (1978); State v. Norton, 335 A.2d 607 (Me. 1975).

<sup>71.</sup> Toomer v. Witsell, 334 U.S. at 408 (Frankfurter, J., concurring).

land or selling the resource to the highest bidder.<sup>72</sup> The value of the proprietary interest which is "taken" is returned to the state in the form of rent payments or sale proceeds. It is only Maryland's method of oyster management, which essentially allows oysters to be given away to the waterman, which creates a spurious "need" for residency discriminations as a means of safeguarding the state's proprietary interests,<sup>73</sup> and it appears that the state ownershipconservation theory cannot, therefore, justify the total exclusion of nonresidents from the state's oyster bars.

The claim that Maryland's residency discriminations are essential to the economic welfare of its residents leans upon a reed more slender than that which supports its conservation of a state-owned resource claim. A state may not use its admitted powers to protect the health and safety of its people as a basis for suppressing competition. The right of nonresidents to bid for the opportunity to rent or purchase a public resource on the same terms as residents would seem to be assured under each of the constitutional provisions considered above, particularly under the commerce clause:

The material success that has come to inhabitants of the states which make up this federal free trade unit has been the most impressive in the history of commerce, but the established interdependence of the states only emphasizes the necessity of protecting interstate movement of goods against local burdens and repressions. We need only consider the consequences if each of the few states that produce copper, lead, high-grade iron ore, timber, cotton, oil or gas should decree that industries in that state shall have priority. What fantastic rivalries and dislocations and reprisals would ensue if such practices were begun.<sup>76</sup>

<sup>72.</sup> Under Maryland law the general procedure for the disposition of state property requires only that it be "for a consideration adequate in the opinion of the Board of Public Works." Mp. Code Ann. art. 78A, § 15 (1957).

<sup>73.</sup> Although Maryland exacts a severance tax of thirty-five cents per bushel of oysters harvested from waters other than the Potomac River, all money collected must be deposited in the Fisheries Research and Development Fund to be used exclusively for the repletion of the natural oyster bars of the state. Md. Nat. Res. Code Ann. § 4-1020 (Cum. Supp. 1977). Because this tax is actually returned to the oysterman through the benefits of the repletion program, it does not compensate the state in any way for the value of its oyster resources which are harvested.

<sup>74.</sup> Missouri v. Holland, 252 U.S. 416, 434 (1920). When the state of Missouri advanced an ownership argument in its suit to enjoin enforcement of a federal treaty regulating the taking of migratory birds, Justice Holmes wrote that "[t]o put the claim of the State upon title is to lean upon a slender reed." *Id.* 

<sup>75.</sup> Hood & Sons, Inc. v. DuMond, 336 U.S. 525, 538 (1949).

<sup>76. 336</sup> U.S. at 538-39.

The *Douglas* Court reaffirmed its commitment to these principles, stating in dicta that the preemption of Virginia's residency requirements for menhaden licenses was "very much in keeping with sound policy considerations of federalism," especially in regard to the need for a free flow of interstate commerce in fish resources:

A number of coastal States have discriminatory fisheries laws, and with all natural resources becoming increasingly scarce and more valuable, more such restrictions would be a likely prospect, as both protective and retaliatory measures. Each State's fisherman eventually might be effectively limited to working in the territorial waters of their residence, or in the federally controlled fishery beyond the three-mile limit. Such proliferation of residency requirements for commercial fishermen would create precisely the sort of Balkanization of interstate commercial activity which the Constitution was intended to prevent.<sup>78</sup>

Arguably, the significance of this language is limited by the factual context of the case, involving the commercial harvest of migratory finfish. That enterprise, the Court observed, "must be conducted by peripatetic entrepreneurs moving, like their quarry, without regard for state boundary lines." Nonetheless, such a forceful and unqualified statement by the Supreme Court is indicative of a predisposition to consider residency discriminations in state fisheries as inimical to federal interests in unhampered interstate commerce.

This broad interpretation of *Douglas* is reinforced by the recent Supreme Court rulings in *City of Philadelphia v. New Jersey*<sup>80</sup> and *Hicklin v. Orbeck.*<sup>81</sup> The *City of Philadelphia* case involved a challenge to a New Jersey law which prohibited the shipment of wastes from outside the state for disposal in New Jersey landfills.<sup>82</sup> The Court determined that the state law created an unconstitutional burden on interstate commerce, because it "impose[d] on out-of-state interests the full burden of conserving the State's remaining landfill space."<sup>83</sup> In this respect the New Jersey law was comparable to

<sup>77, 431</sup> U.S. at 285.

<sup>78.</sup> Id. at 285-86.

<sup>79.</sup> Id. at 285.

<sup>80. 98</sup> S. Ct. 2531 (1978).

<sup>81. 98</sup> S. Ct. 2482 (1978).

<sup>82, 98</sup> S. Ct. at 2533.

<sup>83.</sup> Id. at 2537-39. The Court noted that it expressed no opinion about New Jersey's power, consistent with the commerce clause, to restrict to state residents access to state-owned resources. Id. at 2537, n.6.

Maryland's residency requirements for oyster licenses, and it can be argued that Maryland's imposition of the full burden of conserving oyster resources upon nonresidents, rather than imposing a nondiscriminatory method of limiting entry or otherwise limiting the harvest, is similarly unconstitutional.

In *Hicklin v. Orbeck* the Court struck down an Alaska statute<sup>84</sup> which required that every lease or contract for the development of the state's oil and gas resources contain a term assuring the preferential hiring of state residents. After finding the statute violative of protected privileges and immunities, the *Hicklin* Court described the complementary functions of the privileges and immunities clause and the commerce clause in defining federal-state relations:

Although appellants raise no Commerce Clause challenge to the Act, the mutually reinforcing relationship between the Privileges and Immunities Clause of Art. IV and the Commerce Clause — a relationship that stems from their common origin in the Fourth Article of the Articles of Confederation and their shared vision of federalism, see Baldwin v. Montana Fish and Game Comm'n, supra, \_\_\_\_ U.S. at \_\_\_\_\_, 98 S. Ct. at 1858, renders several Commerce decisions appropriate support for our conclusion. . . . West and Pennsylvania v. West Virginia thus established that the location in a given state of a resource bound for interstate commerce is an insufficient basis for reserving the benefits of the resource exclusively or even principally for that State's residents. Foster Packing Co. v. Haydel, 278 U.S. 1, 49 S. Ct. 1, 73 L. Ed. 147 (1928), went one step further; it limited the extent to which a State's purported ownership of certain resources would serve as a justification for the State's economic discrimination in favor of residents.

West, Pennsylvania v. West Virginia, and Foster Packing thus establish that the Commerce Clause circumscribes a State's ability to prefer its own citizens in the utilization of natural resources found within its borders, but destined for interstate commerce. . . . Although the fact that a state owned resource is destined for interstate commerce does not, of itself, disable the State from preferring its own citizens in the utilization of that resource, it does inform analysis under the Privileges and Immunities Clause as to the permissibility of the discrimination the State visits upon nonresidents based on its ownership of the resource.<sup>85</sup>

<sup>84.</sup> Alaska Stat. §§ 38.40.010 to .090 (1977).

<sup>85. 98</sup> S. Ct. at 2491-92.

The Court ruled that, in view of the commercial significance of the oil and gas of Alaska, the discrimination against nonresidents went "far beyond the degree of resident bias Alaska's ownership of the oil and gas can justifiably support."<sup>86</sup> A concluding quotation in *Hicklin* recalled the vision of federalism underlying the *Douglas* decision:

As Mr. Justice Cardozo observed in *Baldwin v. G.A.F. Seelig*, 294 U.S. 511, 523 (1935), the Constitution "was framed upon the theory that the peoples of the several states must sink or swim together, and that in the long run prosperity and salvation are in union and not division."<sup>87</sup>

As a result of the holding in *Douglas* on the issue of preemption, a real possibility exists that the courts will determine that all federally licensed vessels on the Chesapeake Bay engaged in fishing and oystering<sup>88</sup> are entitled to harvest oysters in Maryland and Virginia on the same terms as the residents of those states. Furthermore, the principles of federalism announced in *Douglas* and reinforced by *Hicklin*<sup>89</sup> suggest that equal access to the substantial commercial enterprise of oyster harvesting may well be impressed with federal interests, deriving from the commerce and privileges and immunities clauses, which mandate a similar result even as to nonresidents who have not obtained federal vessel licenses. Maryland may therefore look forward to the day when peoples of the

<sup>86.</sup> Id. at 2492.

<sup>87.</sup> Id.

<sup>88.</sup> Records of the Coast Guard offices in the Chesapeake Bay region show a total of 2,491 federally licensed fishing vessels, 1,786 engaged in fishing generally and 705 principally engaged in oystering. Letter from Eleanor P. Fischer, Chief, Records and Publications Branch, Merchant Vessel Documentation Division, United States Coast Guard, to Thomas B. Lewis (Feb. 3, 1978).

<sup>89.</sup> It is important to note, however, that *Hicklin* did not hold that state regulations restricting nonresident access to resources in which the state has a proprietary interest necessarily violate the privileges and immunities clause. The Court recognized that a state's ownership of the property with which the statute is concerned is an important factor to be considered in evaluating whether the discrimination against noncitizens violates the privileges and immunities clause. 98 S. Ct. at 2490. In holding that Alaska's ownership of the oil and gas constituted insufficient justification for the pervasive discrimination mandated by the challenged statute, the *Hicklin* Court emphasized that: there must be a substantial reason for the discrimination; there must be something to indicate that noncitizens constitute a peculiar source of the evil at which the statute is aimed; and the discriminatory remedy must be closely tailored to the evil. *Id.* at 2488-89. Because the Alaska statute failed to meet this test, going "far beyond the degree of resident bias Alaska's ownership of the oil and gas [could] justify," *id.* at 2492, it was struck down as violative of the privileges and immunities clause.

several states will be sinking, swimming, and harvesting oysters together in the waters of the state. But the question whether Justice Cardozo's promise of prosperity and salvation will be realized remains. It is clear, however, that Maryland and Virginia will be allowed to impose nondiscriminatory fishery regulations which are reasonably related to the conservation of their shellfish resources. Thus, the creation of a mobile, interstate work force will require each state to reconsider the elements of its oyster management program.

Fortunately, there is an instructive and analogous precedent to the elimination of state residency restrictions which the *Douglas* decision forebodes. That precedent is the elimination of county residency restrictions on Maryland commercial shellfish harvesters as a result of the state court ruling in *Bruce v. Director, Department of Chesapeake Bay Affairs* in 1971.91 Prior to the *Bruce* case, Maryland law prohibited a waterman from taking oysters with hand tongs or patent tongs in waters outside the county in which he resided.92 Similar restraints applied to crabbers.93 The Maryland Court of Appeals ruled that these statutes violated the fourteenth amendment of the United States Constitution and article 23 of the Declaration of Rights of the Maryland Constitution:

We think the statutes set forth an unlawful classification of persons and discriminate not only among the several watermen of the 13 tidewater counties in which crabs and oysters are found in marketable quantities, but also between residents of these counties and those who reside in Baltimore City and the 10 remaining counties of Maryland. In addition, we cannot see in what way the restrictive nature of the statutory provisions bears any reasonable relation to the public interest.<sup>94</sup>

As a result of this ruling, Maryland watermen have been allowed to harvest oysters throughout the state without regard to boundaries.

AN ECONOMIC ANALYSIS OF THE CONSEQUENCES OF Bruce

The changes in the Maryland oyster industry which occurred following the *Bruce* decision were the subject of a study sponsored by

<sup>90.</sup> The majority opinion in *Douglas* stated that "reasonable and even handed conservation measures, so essential to the preservation of our vital marine sources of food supply, stand unaffected by our decision." 431 U.S. at 287. See also Manchester v. Massachusetts, 139 U.S. 240 (1891); Smith v. Maryland, 59 U.S. (18 How.) 71 (1855).

<sup>91. 261</sup> Md. 585, 276 A.2d 200 (1971).

<sup>92.</sup> Md. Ann. Code art. 66C, § 700 (1970).

<sup>93.</sup> Id. § 322.

<sup>94. 261</sup> Md. at 601, 276 A.2d at 208.

the University of Maryland Sea Grant Program. 95 The results of this study indicate that increased waterman mobility resulted in increased fishing effort wherever in the state oyster densities were greatest. The considerations which influence a waterman's decision to seek shellfish outside his own county waters are similar to those which would influence watermen to cross state lines if residency requirements were eliminated. The effects of the increase in mobility since the Court of Appeal's decision in *Bruce* should demonstrate, on a somewhat smaller scale, what might be expected to result if watermen were permitted to move freely through the Maryland and Virginia portions of the Chesapeake Bay. Thus, an understanding of changes in the Maryland oyster industry in the years since the *Bruce* decision should assist fisheries managers in anticipating the consequences of an elimination of state residency requirements.

## Factors Affecting and Affected by Watermen Mobility

To examine changes that have occurred in the Maryland oyster industry since *Bruce*, it is necessary to appreciate the factors that would motivate a waterman to move to a new area and forego harvesting in his usual area of operation. It is also necessary to understand how the aggregate movement of watermen tends to change factors that are important to fisheries managers in the state of Maryland. Several of the factors that motivate individual watermen to move are also the factors that are of interest to state policy makers.

In deciding whether to seek out new oyster bars, the fundamental consideration of the waterman is an economic one: will daily profits in a new area be sufficient to offset the daily profits in his usual area plus the transportation cost of getting to the new area?<sup>96</sup> If two alternative areas of harvest are under consideration, the factors which influence his economic decision are:

- 1) the daily catch that can be obtained in each of the two areas;
- 2) the price of oysters landed in each area; and
- the cost of transitting between the current area of harvest and the alternative area.

<sup>95.</sup> A mathematical description of the decision environment is contained in the Appendix and only its salient features are discussed here.

<sup>96.</sup> There are other considerations such as safety which are beyond the scope of this analysis.

Daily catches and prices also bear on fisheries management decisions. Daily catch rates are a measure of abundance, a factor of obvious concern to fisheries managers. Declining oyster populations are usually detected by drops in the average daily catch of the watermen. Precipitous drops in the past have prompted Maryland and Virginia to undertake programs to replenish the oyster populations. The measure of success of the repletion programs is greater abundance of oysters as represented by daily landings.

The Bruce decision resulted in a systematic alteration of the pattern of average daily catch rates and prices among Maryland counties. Daily catch rates became nearly equalized across the counties, and the price relationship among counties stabilized with watermen in counties closest to major marketing areas receiving the highest dockside price.

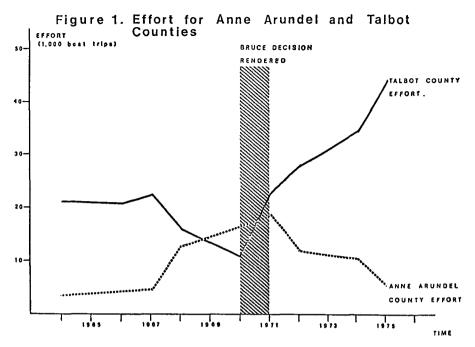
#### Impacts of Intercounty Mobility on Average Daily Catches

To determine how the *Bruce* decision affected oyster bar densities among the counties in Maryland, data on harvesting effort (total annual boat-days) and average daily catch in each county were gathered and compiled for the period from 1964 to 1975.<sup>97</sup> During the early portion of the period (1964–1971), oystermen were restricted from harvesting oysters in the waters of another county. Unrestricted movement was allowed in the latter portion.

The trends in average daily landings in Anne Arundel County (AAC) and Talbot County (TC) illustrate in Figure 1 the change that occurred after 1971. The ratio of daily landings in AAC to TC forms an index of comparative advantage between the counties. Whenever the index rises above one, catches are better in AAC and there is an advantage to oyster there. TC is the better alternative when the ratio goes below one.

Effort rose very slowly in AAC and generally declined in TC over the 1964-1971 period (Figure 1). The AAC increase resulted from either new watermen, watermen fishing more annual boatdays, watermen who changed county residence, or watermen who were in violation of the law but felt expected profits were greater than expected fines. Fishing effort in AAC rose on an average of one thousand boat-days per year, whereas TC lost about one thousand boat-days per year.

<sup>97.</sup> Data were obtained from the Department of Natural Resources, State Government of Maryland.



The reason for this gradual shift in effort is illustrated in Figure 2. Good conditions for oyster reproduction<sup>98</sup> and Maryland's repletion program increased densities in AAC relative to TC. In 1968, an average day on an Anne Arundel oyster bar produced twenty-six bushels of oysters compared to an average of eighteen in TC. The shift of harvesting effort to AAC, however, influenced the counties' relative productivity so that, by the time of the *Bruce* decision, oyster densities were nearly the same.

The freedom to move among counties should have the effect of increasing the rate of change in county effort and also reducing the likelihood of productivity ratio deviations from one. Both of these effects are shown in Figures 1 and 2 for the post-Bruce period. The increase in effort in TC was obviously rapid between 1971 and 1975, averaging around eight thousand additional boat-days per year. The impact of this rapid movement on oyster density is very pronounced when the average product ratio is observed. The ratio remained very stable after 1971 (ranging from .72 to .80), whereas it varied

<sup>98.</sup> The spatfall of 1963 in Anne Arundel's Severn and South Rivers was the largest recorded in the period 1939-1975. D. Meritt, Oyster Spat Set on Natural Clutch in the Maryland Portion of the Chesapeake Bay (1939-1975) (Feb. 1977) (unpublished Special Report No. 7 on file at University of Maryland Center for Environmental and Estuarine Studies). These oysters began to reach commercial size in 1967 and served as the foundation for landings in the late 1960's and early 1970's.

markedly (ranging from .8 to 2.1) in the years prior to the *Bruce* decision. In essence, at any time when landings per boat were greater in TC, AAC oystermen chose to transfer their fishing efforts to TC. The greater stability in the average product ratio was a direct result of greater variation in effort between counties.

Although the visual representation in Figures 1 and 2 is convincing, it is also possible to determine statistically whether the *Bruce* decision has had an impact on the relative oyster densities by considering the relative densities in the pre-*Bruce* period as a control sample and the relative densities after the *Bruce* decision as a sample that has been "treated" by the decision. The hypothesis that the decision had no effect on the relative oyster densities was tested using an F-test (see Appendix, Table 1) and rejected at the 95% confidence level.

To determine whether the shifts in fishing effort between AAC and TC were indicative of statewide changes, data on average productivity and effort were also analyzed and compared for Talbot and Queen Anne's counties (QAC). In this analysis, pre-Bruce conditions were similar to those in the first case. The average productivity of a boat-day in QAC had exceeded the TC figure since 1966. By 1970, an average boat-day in Queen Anne's County provided about thirteen more bushels of oysters than in Talbot County. The Bruce decision and the ensuing mobility equalized the

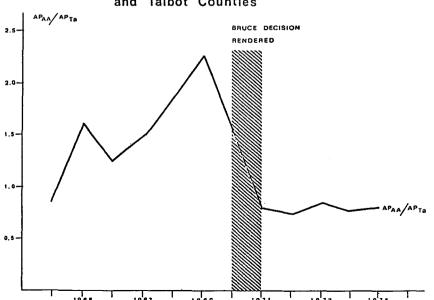


Figure 2. Average Productivity Ratio for Anne Arundel and Talbot Counties

average productivity within one year so that, in the 1971 season, a boat-day in either county yielded an average of thirty-three bushels. Figure 3 illustrates this effect graphically, and the results of an analysis of a variance test on the effects of the *Bruce* decision allows rejection of the hypothesis that the average product ratios behaved in the same manner before and after *Bruce* (Appendix, Table 1). It can therefore be stated with confidence that the statewide shifts in fishing effort were attributable to the Court of Appeals decision in *Bruce*.

To extend the analysis beyond a county-to-county movement and demonstrate what could happen between adjacent states, the data were aggregated and analyzed on a Western Shore-Eastern Shore basis. The daily landings in counties on the Western Shore of the Chesapeake Bay were averaged and divided by the average daily landing in counties on the Eastern Shore. This relative regional density was then examined to test whether the *Bruce* decision had regional impacts.

Figures 4 and 5 show the levels of effort and average productivity in Western and Eastern Shore counties. Prior to the *Bruce* decision, the oyster density on the Eastern Shore was lower than that of the Western Shore because of good Western Shore oyster reproduction.<sup>99</sup> At the time of the *Bruce* decision, the relative density

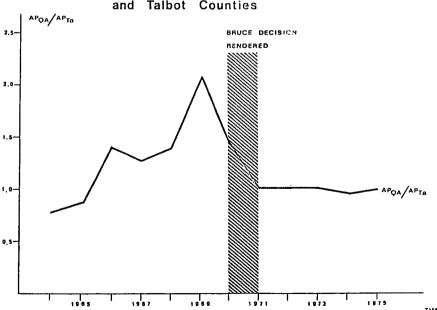


Figure 3. Average Productivity Ratio for Queen Annes and Talbot Counties

Figure 4. Effort for Western and Eastern Shores of the Chesapeake Bay

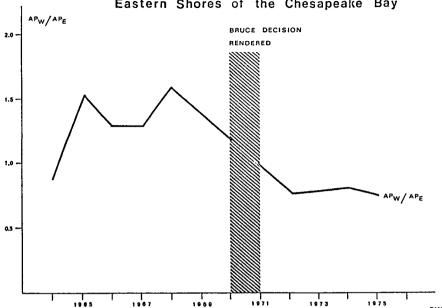
of Western Shore oysters was declining, causing an exodus from the Western Shore and an increase in effort on the Eastern Shore. The relative density of oysters in the regional analysis stabilized just as in the county analysis. Statistically, the regional impact of *Bruce* is highly significant (Appendix, Table 1). Thus, it can be stated with some certainty that the elimination of county residency restrictions has had a substantial effect on the mobility in Maryland oyster fishery and on the densities of oysters across the state.

### Costs of Mobility and Mobility Restrictions

Using equation 4 in the Appendix, it is possible to calculate the costs incurred by oystermen whenever they transit from AAC to TC. In essence, oystermen will transit from AAC to TC if transit costs are less than the difference between daily net income in TC and AAC. If one assumes that oystermen will move until transit costs just equal the difference, then data on daily net income in the two counties can be used to estimate transit costs. The calculations, based on the data presented in the graphs, indicate that the transit costs for one boat-day were less than six dollars over the period 1971–1975, averaging \$3.60 (Appendix, Table 2). This figure represents the costs of gasoline and other pecuniary outlays.

It is also interesting to calculate the costs that were imposed on watermen in TC in the pre-Bruce period by the mobility restrictions. The negative travel costs calculated (Appendix, Table 2) are an

Figure 5. Average Productivity Ratio for Western and Eastern Shores of the Chesapeake Bay



indication of the additional revenue that a TC waterman would have gained if he had spent a boat-day in AAC waters instead of TC waters. For this purpose, it will be assumed that it costs the same to transit from AAC to TC as it does from TC to AAC and that costs have not changed substantially over the entire period of analysis. Thus, by subtracting the transit costs computed in the post-Bruce period from the additional revenues that could have been made leaving TC for AAC, one obtains an estimate of the net dollar gains a Talbot oysterman could have made by going to AAC for one boat-day. Because existing Maryland law forbade that transit, the figure also represents the average opportunity cost imposed on the oysterman by the law invalidated by Bruce. The range of the opportunity costs decrease from \$10.00/boat-day in 1969 to nothing in 1966, with an average of \$4.00/boat-day from 1965 to 1970.

Similarly, transit costs incurred by the waterman travelling between QAC and TC and the opportunity costs imposed by the restriction of movement between those counties may also be calculated from the data in the Appendix. Transit costs between these counties, averaging \$1.08 per boat-day, were less than in the AAC-TC case (\$3.60/boat-day). This is not an unreasonable estimate as QAC and TC border one another and Eastern Bay and travel costs should be lower but not negligible. The opportunity costs, on the other hand, were larger in this case and averaged about \$4.80 per boat-day. This is primarily due to the larger differences in oyster

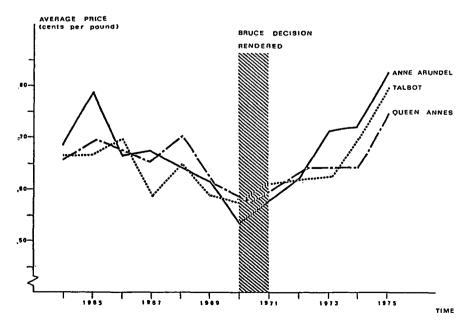
densities in QAC and TC before the Bruce decision and to lower transportation costs.

Opportunity costs calculated for the Eastern Shore watermen who were barred from Western Shore oyster bars were greater than those found in the regional comparisons. Transit costs derived from aggregated Western Shore/Eastern Shore data averaged \$11.20 per boat-day for the post-Bruce period, about three times the cost of a transit between AAC and TC. When calculated using this cost figure, average opportunity costs per day for Eastern Shore fishermen for the five years prior to the Bruce decision are \$5.38. Given the magnitude of the opportunity costs imposed by the county residency requirements, it is not surprising that watermen challenged the legitimacy of the law.

#### Impacts on County Price Patterns

The changes in oyster densities occurring after the Bruce decision has a substantial impact on dockside price patterns among the counties. Prior to Bruce, prices among counties varied widely and randomly. No one county's price was consistently the highest. When random events such as good spatfall or the opening of closed shellfish area changed the oyster density in one county, creating large supplies, low prices were generated for several years because fishing effort could not be rapidly shifted to take advantage of the

Figure 6. Average Price Per Pound (Weighted Average)



higher yields so as to increase landings and depress prices. The random price pattern which resulted is illustrated in Figure 6 for three of Maryland's counties for the period 1964 to 1971.

After 1971, however, a much more stable and predictable pattern of county oyster prices emerged. It would be expected that, all other things being equal, oysters landed in the county closest to the principal marketing center would bring the highest dockside price because the wholesalers' shipping costs would be the lowest. This expectation is confirmed in Figure 6. Since 1972, Anne Arundel County oyster landings have consistently commanded the highest prices, presumably because of the short distance from Baltimore, the principal market for processed products. During this period, oyster densities have remained relatively equal among the counties, as discussed above.

#### The Consequences of Eliminating State Residency Requirements for Oystermen

An understanding of the basic differences in the Maryland and Virginia oyster fisheries is necessary to project properly the lessons of Maryland's experiences with intercounty mobility to an interstate Chesapeake Bay oystery. Thorough studies of the respective state oyster programs have been made, 100 but the essential characteristics may be digested as follows:

- 1) The average productivity of public oyster grounds is thought to be lower in Virginia than in Maryland.<sup>101</sup>
- 2) Private oyster leases in Virginia cover about ten times the area leased in Maryland. 102

<sup>100.</sup> See, e.g., Alford, The Role of Management in Chesapeake Oyster Production, 63 GEOGRAPHICAL REV. 44 (1973); D. Haven, W. Hargis & P. Kendall, The Oyster Industry of Virginia: Its Status, Problems and Promise (1978) (unpublished; on file at Virginia Institute of Marine Science); R. Suttor, The Chesapeake Bay Oyster Fisheries: An Econometric Analysis (1970) (miscellaneous publication No. 740 on file at Agricultural Experiment Station, University of Maryland).

<sup>101.</sup> It is difficult to make comparisons on boat-days between the states because methods and efficiencies vary substantially; however, on the Potomac River, where both states have access, Virginians land far greater amounts of oysters. In December 1976, for example, Virginians landed over 200 times the amount that Marylanders landed. Obviously, there are more opportunities to get to denser oyster beds in Maryland.

<sup>102.</sup> VIRGINIA COMMISSIONER OF MARINE RESOURCES, ANNUAL REPORTS (1975) (reports around 100,000 leased acres in Virginia in 1974, whereas personal communication by the authors with Mr. F. Sieling of Maryland's Department of Natural Resources revealed 9,025 acres in Maryland 1977).

3) There are over two thousand federally licensed fishermen around the Bay, seven hundred of whom are principally engaged in oystering.<sup>103</sup>

It would appear that some portion of the licensed Virginia watermen would have an incentive to enter Maryland waters to oyster, at least insofar as the greater returns for a given amount of effort offset transit costs. The extent of such movement is difficult to predict, however, and may be affected by non-economic considerations. For example, one might expect Virginia watermen on the Western Shore to take advantage of the new mobility more readily than those on the Eastern Shore. Along the Potomac River, which divides the states on the Bay's Western Shore, there has been a long tradition of intermingling of Maryland and Virginia watermen. 104 These watermen may have less reluctance to expand their efforts to the public grounds in the Patuxent River, for example, than watermen on Virginia's Eastern Shore. Isolation and strong community feelings may deter a rapid influx of Virginians into Maryland waters along the Eastern Shore.

Just as the elimination of county residency requirements resulted in an equalization in oyster densities among the counties, the elimination of state residency requirements permits a transfer of effort by Virginians to the more productive Maryland oyster bars. Because the transfer of effort will initially be toward Maryland, Virginia oysters will be spared in the short run. An equilibrium in regional densities should be achieved rapidly, as in the post-Bruce period, after which the concentration of effort will be drawn toward particular areas of greater abundance, as determined by a good spatfall, seeding efforts, or the opening of previously closed shellfish grounds, and away from poorer, less productive grounds which may be affected by disease, pollution, predators, ice or other problems.

Interstate mobility will exacerbate the tendency of the individual waterman to place a higher priority on immediate returns rather than on long-term productivity of the public bars. In the case of a private, leased bed, on the other hand, the lessee is most likely to adopt management practices oriented toward conservation and long-term productivity<sup>105</sup> because he has the greatest incentive to defer present harvesting to assure future propagation. During the period prior to the *Bruce* decision, each waterman shared the oyster

<sup>103.</sup> See note 88 supra.

<sup>104.</sup> Historically, access to the Potomac River has been shared by Maryland and Virginia residents. Md. Nat. Res. Code Ann. § 4-306 (1974 & Cum. Supp. 1977).

<sup>105.</sup> See discussion in Power, More About Oysters, supra note 1, at 200.

grounds of his county only with other county residents. The resource was not exclusive, but within this limited "commons" it was possible that the waterman could still view deferred production as being within his economic self-interest. However, as these bars are opened to all state residents, and eventually to any waterman at all, the economic incentive of the individual to maximize immediate gains from the available oyster resources must take greater precedence. The aggregate expression of individuals' depleting behavior would be a redistribution of state landings from the future into the present. The management practices of the states must therefore be prepared to restrain this tendency.

Even after densities in each state have become equalized due to interstate mobility of oystermen, the Virginia oyster industry as a whole will be less vulnerable to the effects of a shifting oyster fleet. This mobility will affect only public bars and a far greater part of the Virginia industry than the Maryland industry depends upon the use of privately leased oyster grounds. It is unlikely that non-residents will immediately claim the right to disenfranchise private leaseholders. Thus the infiltration of nonresidents into the privately leased grounds in Virginia will be controlled by the manner prescribed by state law for applying for the right to lease a given tract. While in each state private leases are presently limited to residents, these restrictions appear to be as vulnerable to constitutional challenge as the more general ban on nonresident oystermen.

Again, the state ownership theory provides no logical justification for the exclusion of nonresident lessees because the value of the use of the property is paid to the state as rent. The nonresident lessee, therefore, would not take or even share in the common property of the state. The state, as a lessor of real property, is no more immune to the requirements of the fourteenth amendment<sup>108</sup>

<sup>106.</sup> Md. Nat. Res. Code Ann. §§ 4-1108 to 1118 (1974 & Cum. Supp. 1977); Va. Code Ann. §§ 62.1-4, 28.1-108 to 118.1 (1950 & Cum. Supp. 1978).

<sup>107.</sup> Md. Nat. Res. Code Ann. §§ 4-1108(a), -1112(b) (1974); Va. Code § 28.1-122 (1950).

<sup>108.</sup> See, e.g., Burton v. Wilmington Parking Auth., 365 U.S. 715 (1961). An argument might be made that a state could lawfully prohibit an alien from acquiring a property interest, such as a leasehold, within its borders. See, e.g., Blythe v. Hinckley, 180 U.S. 333, 341-42 (1901).

<sup>[</sup>But] [r]ecently the Court has taken a more restrictive view of the powers of a State to discriminate against non-citizens with respect to public employment, compare Crane v. New York, 239 U.S. 195 (1915), aff'g People v. Crane, 214 N.Y. 154, 108 N.E. 427, and Heim v. McCall, 239 U.S. 175 (1915), with Sugarman v. Dougall [413 U.S. 634 (1973)] . . . and with respect to the distribution of public funds and the allocation of public resources, compare

and commerce clause than it is in its capacity as regulator of fisheries within state waters.

The twenty-year duration of individual private leases in Maryland and Virginia will slow the influx of newcomers even if nonresidents do become eligible to hold such leases. Further delay would result from laws which give preference to existing lease-holders for the right to renew their leases. Such a preference has some justification as a sound conservation measure as the lessee, in this circumstance, is encouraged to employ practices likely to result in the greatest long-term yield. If the right to renew were assured, the lessee would not be inclined to deplete his oyster beds at the end of the lease period.

The *Douglas* opinion emphasized that "reasonable and evenhanded conservation measures, so essential to the preservation of our vital marine sources of food supply, stand unaffected by our decision." Certainly, the conservation of the fishery through the use of long-term oyster leases would be found to be reasonable, but preferences in lease renewals are more doubtful. While the widespread use of long-term, renewable private oyster leases in a state's management program would serve to buffer the impacts resulting from nonresident fishermen, it would also perpetuate the exclusion of nonresidents. In other circumstances, limited entry schemes which allowed preferences to prior holders of fishing licenses have been declared unconstitutional where the effect was to exclude nonresidents. However, the need for continuity in oyster leases may be found to justify the discriminatory effects.

McCready v. Virginia, 94 U.S. 391 (1877), and Patsone v. Pennsylvania, 232 U.S. 138 (1914), with Graham v. Richardson, [403 U.S. 365 (1971)] . . . and Takahashi v. Fish and Game Comm'n, [334 U.S. 410 (1948)].

Examining Board v. Flores de Ortero, 426 U.S. 572, 604 (1976). This argument would have no application to nonresidents who are not aliens and who seek oyster leases. 109, 431 U.S. at 287.

<sup>110.</sup> Grandfather provisions in state fishing license laws which effectively exclude nonresidents have been found unconstitutional. In Reetz v. Bozanich, 297 F. Supp. 300 (D. Alaska 1969), vacated on other grounds, 397 U.S. 82 (1970), a federal court held that state laws which limited the total number of licenses and which granted preferential treatment to previous license holders violated the equal protection clause. The principal authority for that holding, Morey v. Doud, 354 U.S. 457 (1957), was subsequently overruled in New Orleans v. Dukes, 427 U.S. 297 (1976). See also Dobard v. State, 149 Tex. 332, 233 S.W.2d 435 (1950), discussed in Comment, The Constitutionality of a Program Restricting the Number of Commercial Fishermen in the Coastal Waters of the United States, 34 La. L. Rev. 801, 816 (1974); Note, Massey v. Apollonio: Is Residency an Impermissible Conservation Device?, 6 Env. L. 543 (1976).

<sup>111.</sup> Note that Maryland law also prohibits corporations from leasing private oyster beds. This provision limits the size of the economic unit engaged in oyster

Maryland currently subsidizes its oyster repletion program at a cost of nearly one million dollars per year, in addition to revenues generated by inspection and severance taxes. 112 When the benefits of the repletion program are no longer confined to state residents, political support for continuing the subsidy will decline. If the repletion program is essential for the maintenance of productivity on public bars, then oyster taxes would have to be increased until sufficient revenues are generated to fund the entire program without subsidization. 113 Note that even when taxes are raised to the point where the costs of the repletion program are covered, the state receives no net benefit in exchange for oysters harvested.

With the elimination of state residency requirements for oystermen, the states of Maryland and Virginia would have an unprecedented need for the development of a joint management program. The Potomac River Fisheries Compact, which provides for joint management of one river, could serve as a model for an enlarged Chesapeake Bay oyster management scheme. The coastal zone management plans currently under development in both states should be modified to accommodate the need for greater cooperation in fisheries management as state residency restrictions are eliminated.

In summary, the Maryland oyster industry, like the fisheries in many coastal states, stands in a precarious position as a result of the *Douglas* decision. Without the insulation provided by state residency restrictions, public oyster bars will be exposed to more intensive fishing effort. The state should plan now to restructure its oyster management program to protect its property interest in state oyster grounds, to avoid subsidizing nonresident oystermen out of general state revenues, and to encourage more widespread cultivation of privately leased oyster beds.

cultivation and the capital resources available for that activity. Also, the discrimination against corporations may be invalid under the equal protection clause of the fourteenth amendment. See Edwards v. Leaver, 102 F. Supp. 698 (D.R.I. 1952); Power, More About Oysters, supra note 1, at 219-20.

<sup>112.</sup> Md. Nat. Res. Code Ann. § 4-1020(c) (1977).

<sup>113.</sup> It should be noted that Maryland might also be able to retain the subsidy and impose a disproportionate oyster tax burden on nonresidents. See note 66 supra.

#### **APPENDIX**

The economic rationale describing the mobility of a waterman can be represented by a simple mathematical model. For illustrative purposes, the model will be established for an oysterman living in County A and having the option of oystering in County T. The oysterman's economic problem is how to obtain the greatest profits or income from allocating his fishing effort between the two counties. This can be represented as a mathematical optimization problem:

1. Maximize 
$$L = P_A \cdot F_A (X_A, D_A) - C_A (X_A)$$
  
+  $P_T \cdot F_T (X_T, D_T) - C_T (X_T) - M \cdot X_T$ 

where:

L is profit,

 $X_T$ ,  $X_A$  are boat-days in counties T and A,

 $P_{T}$ ,  $P_{A}$  are prices per pound in counties T and A,

 $F_{T}$  (...),  $F_{A}$  (...) are oyster landings produced by boat-

days (X) and oyster density (D) in counties T and A,

 $D_T$ ,  $D_A$  are densities of oysters in counties T and A,

C<sub>T</sub> (...), C<sub>A</sub> (...) are total costs of boat-days in counties T and A, M is the cost per trip of transitting from county

A to T.

For the oysterman to fish both counties and maximize his profits, the following conditions must be met:

2a. 
$$\partial L/\partial X_T = P_T(\partial F_T/\partial X_T) - \partial C_T/\partial X_T - M = 0$$

2b. 
$$\partial L/\partial X_A = P_A(\partial F_A/\partial X_A) - \partial C_A/\partial X_A = 0$$

The meaning of equation 2a is simply that the waterman will work only in county T until that daily income  $P_T$  ( $\partial F_T/\partial X_T$ ) is

equal to the daily costs he incurs  $({}^3C_T/{}^3X_T + M)$  working there, the cost of working in T plus the cost of travel. If he works more days, his daily costs will exceed his returns. The meaning of equality 2b is very similar except the waterman now measures daily returns in county A,  $P_A({}^3F_A/{}^3X_A)$ , against daily costs of working in county A  $({}^3C_A/{}^3X_A)$ . There are no transit expenses (M).

Together, equations 2a and 2b suggest that:

3. 
$$P_T(\partial F_T/\partial X_T) - \partial C_T/\partial X_T - M = P_A(\partial F_A/\partial X_A) - \partial C_A/\partial X_A$$

That is, days are allocated so that marginal profits in county T must equal marginal profits in county A. One may reasonably assume that anytime a day in county T earns more than a day in county A, the waterman will fish in county T.

To test the relationship as stated in equation (3) with available data, two simplifying assumptions will be made:

- (a) The marginal product (3F/3X) of a boat trip in a county is equivalent to the average annual product of a boat trip (AP) in that county;
- (b) The marginal cost of a boat trip in county

$$T(\partial C_T/\partial X_T)$$
 equals the marginal cost of a boat trip in county  $A(\partial C_A/\partial X_A)$ .

With these assumptions, it is now possible to develop an equation that shows the variables affecting intercounty mobility and that are available to use in the model. The following equalities are derived from equation 3 and the two assumptions:

Average income per day in Talbot County = Average income per day in Anne Arundel County, plus the daily cost of travelling from Anne Arundel to Talbot County (P<sub>T</sub> • AP<sub>T</sub> = P<sub>A</sub> • AP<sub>A</sub> + M).

Equation 4 relates the principal factors which are important determinants of intercounty mobility: oyster prices in the respective counties, the density of oysters (inferred from average productivity), and the costs of travelling from county A to county T.

Boat-Day Between Anne Arundel-Talbot Counties, Queen Annes-Talbot Counties, and Analysis of Variance for the Treatment of Unrestricted Mobility on the Ratio of Catch per Western-Eastern Shore of Maryland. Table 1:

Counties	Source of Variation	Degrees of Freedom	Mean Sum of Squares	F-ratio
(a.) Anne Arundel- Talbot	Among periods (1966-1970) (1971-1975) Within periods Total	H &I 6	1.64 .063	26.0
(b.) Queen Annes- Talbot	Among periods Within periods Total	<del>-1</del> &1 &	.6 .04	14.29
(c.) Western- Eastern Shore	Among periods Within periods Total	1 8 6	.006	72.07

F.05 [1,8] = 5.32 < [all F-ratios, indicating that we can reject the null hypothesis that the Bruce decision had no impact on between-county oyster densities]

Estimated cost<sup>1</sup> per trip (\$/day) and opportunity costs<sup>2</sup> of pre-Bruce restrictions (\$/for day) three cases, 1965-1975. Table 2:

	Anne	Anne Arundel- Talbot Case	Queen Annes- Talbot Case	nnes- Case	Western-Eastern Shore Case	Sastern Case
Year	Travel Costs (\$/day)	Travel Costs Opportunity Costs (\$/day)	Travel Costs Opp. Cost (\$/day) (\$/day)	Opp. Cost (\$/day)	Travel Cost Opp. Cost (\$/day)	Opp. Cost (\$/day)
Pre-Bruce						
1965	-6.4	2.8	.87	1	-21.5	10.3
1966	-1.2	1	-2.62	2.32	-19.0	7.8
1967	<b>—7.0</b>	3.4	-4.59	4.29	-20.0	8.8
1968	-9.7	5.9	-6.24	5.94	-8.0	ı
1969	-13.6	10.0	-11.31	11.01	<del>-0.0</del>	ı
1970	-5.4	1.8	-9.28	8.98	-3.0	i
Post-Bruce						
1971	5.6	I	.15	1	11.6	ļ
1972	5.9	İ	1.95	1	15.0	i
1973	4.	ı	-1.80	1	7.0	1
1974	3.4	1	2.44	1	8.0	1
1975	3.0	1	.05	1	14.4	1

<sup>1</sup> Computed on basis of:  $M = P_AAP_A \cdot P_TAP_T$  [this equation, which incorporates equations (3) and (4), expresses county prices and average productivities as ratios].

<sup>2</sup> Computed by subtracting the average travel cost in the post-Bruce period from the absolute value of the travel cost in the pre-Bruce period.