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Biota and business — Opposing forces?*

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Abstract

There is a trend in environmental regulation, traditionally driven by human health concerns, towards increased sensitivity to ecological concerns. At the center of concern for the ecology is the Endangered Species Act, which requires federal agencies to consult with the Fish and Wildlife Service before undertaking any action authorized, funded or carried out by the federal agency. This paper discusses the perspective of the regulated community on the increasingly active role the Fish and Wildlife Service is playing in regulatory activities such as water quality permitting.

1. Introduction

American industry has long since come to recognize the impact of environmental regulation on business enterprise. Environmental regulation includes heightened concern not merely to protect human health, but also to preserve the ecology. We are all familiar with the ongoing debate about wetlands. Less prominent are such debates as those about the scope and extent of waste site cleanups to go beyond protecting humans to protection of biota.

This paper examines ecological issues through a look at one of the oldest federal environmental statutes, the Endangered Species Act. This legislation, enacted early in the Richard Nixon administration, was intended purely to protect our ecology. Its requirements have, in the past and in the present, directly focused the debate between commercial development and ecological protection.

Congress passed the Endangered Species Act of 1973 (ESA) to protect certain species of wildlife, fish, and plants from extinction [1]. The Act was intended to

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protect not only the species, but also their habitat [2]. Under the ESA, the Secretary of the Interior is primarily responsible for preparing a list of species that are endangered or threatened [3]. For threatened species, those which are likely to become endangered within the foreseeable future, the Secretary of the Interior must also issue protective regulations [4].

The ESA contains a provision authorizing the Secretary of the Interior to enter into cooperative agreements with states which have created adequate and active programs to conserve endangered and threatened species [5]. While this is not a full authorization program such as those under the Resource Conservation and Recovery Act (RCRA) or Clean Water Act, the Secretary must execute a cooperative agreement to assist the state with its program once the state program is determined to meet the ESA requirements. Basically, to meet the ESA, the state program must:

1. Enable a state agency to conserve both federal and state listed endangered and threatened fish and wildlife,
2. The state must have an acceptable conservation program for federal listed endangered and threatened fish and wildlife,
3. The state must be able to investigate and determine both the status and survival requirements of resident species,
4. The state must be able to acquire habitat for the conservation of endangered or threatened species, and
5. The listing of resident species of fish and wildlife as endangered or threatened must include public participation provisions [6].

There is a similar provision for a cooperative agreement if the state has an adequate and active program to conserve resident species of endangered or threatened plants [7]. The cooperative agreements include federal financial assistance [8]. The cooperative agreement vitiates the ESA prohibition against the taking of resident endangered or threatened species, leaving the protection under the state laws and regulations as the major focus on protecting endangered or threatened species [9].

The ESA levies planning requirement on federal agencies and their licensees or permittees. It also prohibits taking endangered species or engaging in commercial activities involving endangered species [10].

The key provision of the ESA which first drew national notoriety was the planning requirement of Section 7, which mandates federal agencies to ensure that actions authorized, funded or carried out by them did not jeopardize the continued existence of an endangered species or result in the destruction of an endangered species habitat [11]. In the lawsuit *TVA vs. Hill*, the Supreme Court affirmed a permanent injunction against completing and operating the Tellico Dam on the Little Tennessee River, near Fort Loudon, Tennessee because the project would have resulted in the destruction of the endangered snail darter's habitat and jeopardized the snail darter's continued existence. The Court stopped all activities associated with the dam which might destroy or modify the snail darter's habitat, even though the project was begun seven years prior to passage of the ESA, and a large portion of the $78 million spent

on the project would be wasted [12]. Subsequent to the decision, the ESA was amended to include an exemption process to permit case-by-case exemptions from the ESA, and legislation was passed, specifically authorizing the completion of the Tellico Dam [13].

Federal agencies must still consult with the Secretary of the Interior to ensure that their actions are not likely to jeopardize the continued existence of any endangered or threatened species nor destroy or modify any critical habitat [14]. The issuance of permits or licenses may be such a federal action. To assist federal agencies in anticipating potential conflicts with the ESA, the agencies are directed to inquire of the Secretary of the Interior (hereinafter referred to as the Secretary) whether any listed or proposed species are present in an area in which they intend to take action. If the Secretary advises, "based on the best scientific and commercial data available," that a species may be present, then the agency must conduct a biological assessment to identify any endangered or threatened species which are likely to be affected [15]. Any actions which would jeopardize the existence of an endangered or threatened species or destroy or severely impact a critical habitat can only proceed if an exemption is granted under the ESA [16]. The Secretary must issue a written opinion about the consultation and, even if he determines the action does not violate the ESA, he must still specify the impact of any incidental taking on the species, what reasonable and prudent measures are required to minimize the impact, and any required terms and conditions necessary to keep the action within the ESA [17]. If the action will violate the ESA, it may not proceed unless an exemption is obtained.

Obtaining an exemption to the ESA is not an easy process, although the exemption was added expressly to avoid *TVA vs. Hill* situations [18]. The Governor of a state in which an action will occur, a federal agency, or a permit or license applicant may apply to the Secretary to exempt an agency action from the ESA, provided the consultation process resulted in an opinion from the Secretary that the action would threaten a protected species [19]. The Secretary considers the application and either denies the application for failing to meet the three criteria below, or if he feels the three criteria have been met, he holds a hearing with the Endangered Species Committee (ESC) [20]. To get to the hearing, the agency and the applicant (if not the agency) must have:

- carried out the consultation in good faith, making reasonable efforts to find an alternate or modified means of action which would not violate the Act,
- conducted the biological assessment, and
- refrained from making any irreversible or irretrievable commitment of resources [21].

Prior to the ESC's decision, the Secretary submits a report to the ESC discussing alternatives to the action, the benefits of the agency action and alternatives consistent with conserving the species, a summary of evidence indicating whether the action is in the public interest and of either national or regional significance, reasonable mitigation measures that should be

considered, and whether any irreversible or irretrievable commitments of resources were made by the agency or applicant [22]. Within thirty days of receiving the Secretary's report, the ESC will determine whether to grant the exemption. The ESC shall grant the exemption if five of the seven members vote on the record to determine that:

(i) there are not reasonable and prudent alternatives to the agency action;
(ii) the benefits of such action clearly outweigh the benefits of alternative courses of action, consistent with conserving the species or its critical habitat, and such action is in the public interest;
(iii) the action is of regional or national significance; and
(iv) neither the Federal agency concerned nor the exemption applicant made any irreversible or irretrievable commitment of resources... [23].

The ESC must also establish reasonable mitigation and enhancement measures to be conducted in association with the action. Denial of an exemption is reviewable in the United States Court of Appeals for the circuit where the agency action will be carried out [24].

If a citizen wishes to challenge an agency action, there is a citizen suit provision which authorizes any person to sue another, including the United States or its instrumentalities, to enjoin them from violating any provision of the ESA or its regulations [25]. The suit may be brought in federal district court, but only sixty days after the Secretary has been given written notice of the violation [26]. Court costs and attorney fees may be awarded to either party [27]. Citizen suits may also be brought to compel the Secretary to take emergency actions under the ESA to prevent the taking of any resident endangered or threatened species, but the sixty-day notice restriction applies and if the secretary has already commenced an action to determine if the emergency exists, the suit may not be commenced [28].

The ESA also provides civil and criminal penalties for violations. Knowing violations of the ESA authorize civil penalties of from $12,000 to $25,000 for each violation, and other violations authorize a civil penalty of not more than $500 for each violation [29]. Criminal sanctions for knowing violations authorize maximums of $25,000 to $50,000 and authorize confinement of up to six months or a maximum of one year [30].

Because of the requirement that federal agencies consult with the Secretary, actually the United States Fish and Wildlife Service (FWS), to ensure their actions do not jeopardize threatened or endangered species, obtaining a permit from a federal agency may very well trigger the consultation process, including a biological assessment [31]. In *Conner vs. Burford*, the court of appeals stopped any surface disturbing activities on more than 1.3 million acres of national forest lands in Montana for the FWS's failure to conduct biological assessments, which included post oil and gas leasing activities, such as development and production. The acreage covered included habitat for the grizzly bear, bald eagle, peregrine falcon, and gray wolf — all endangered species [32]. Aside from inconveniencing the federal agencies involved, this prevented private enterprise from developing over 700 leases

which the BLM had sold for exploration, development and production of oil and gas [33].

In *Roosevelt Campobello Int'l Park vs. EPA* [34], the appellate court vacated the EPA's decision to issue a NPDES permit to an oil refinery and deepwater terminal at Eastport, Maine. Although the Maine Bureau of Environmental Protection had approved locating the terminal in Eastport subject to certain conditions, and an adjudicatory hearing had been held, finding the terminal was not likely to jeopardize endangered species, such as the right and humpback whales, the appellate court found that the EPA should have had simulation studies done to determine the threat of oil spills to the whales [35]. The case was remanded to the EPA to reevaluate their jeopardy determination after considering real time simulation studies, an ESA hydrographic survey, and a 1980 whale study. Thus, even where approval appeared to be granted, a suit by a private entity under both the Clean Water Act and the ESA knocked a major project off course.

More recent events have involved the impact of red-cockaded woodpeckers and northern spotted owls on the timber industry. In 1991, the Fifth Circuit Court of Appeals affirmed the enjoining of even-aged lumbering within 1,200 meters of active red-cockaded woodpecker colonies in Texas national forests [36]. The court prevented U.S. Forest Service (USFS) actions that might jeopardize the red-cockaded woodpeckers until the USFS, after consultation with the U.S. Fish and Wildlife Service, developed timber management plans that adequately addressed the effects of timber activities on the red-cockaded woodpecker's habitat and continued survivability [37]. This suit had started in 1985 to object to the USFS's policy of cutting trees in Texas wilderness areas to control pine beetle infestation. However, in 1987, after a 40–50 percent decline in the woodpecker population from 1983 to 1987, the suit was amended to challenge even-aged harvesting which dramatically reduced the preferred habitat of the woodpeckers — trees over one hundred years old [38]. Although the trial court ultimately refused to enjoin all even-aged harvesting in East Texas, the impact of restricting operations for a lengthy period of time and the uncertainty of pending litigation can have a chilling effect on business [39].

The brouhaha over the northern spotted owl in the northwest has reached such epic proportions that the Endangered Species Committee was convened and issued an exemption ruling [40]. Although the litigation has taken the form of a National Environmental Policy Act (NEPA) suit, the underlying issue is the threat to the habitat and survivability of the northern spotted owl, now a threatened species [41]. Suit was brought in 1987, alleging NEPA violations, claiming the environmental impact documents did not adequately consider population size and habitat fragmentation on the long-range survival of the spotted owl [42]. The owls' preferred habitat is old growth forest containing "multi-layered, multi-species canopy dominated by large (>30 inches in diameter at breast height [dbh]) over-story trees" [43]. Legislation was passed to preclude the NEPA suit which complicated the matter even further [44].

Ultimately, on May 23, 1991, the federal court in Washington ordered the U.S. Forest Service to revise its guidelines to protect the owl and enjoined logging in all suitable owl habitat on Forest Service lands until the guidelines were adopted [45]. Moreover, on September 11, 1991, the District Court for the District of Oregon enjoined the Bureau of Land Management (BLM) from implementing timber sales associated with the "Jamison Strategy" [46] because the Fish and Wildlife Service had determined that 52 of those sales were likely to jeopardize the survival of the northern spotted owl. The injunction was to continue until the BLM had consulted with the Fish and Wildlife Service over the effects of the "Jamison Strategy." An amended NEPA complaint alleged that permitting logging on BLM lands without an updated environmental impact statement concerning the effects on the northern spotted owl violated NEPA and asked for an injunction to prevent all BLM authorized land-altering activities awarded after January 1, 1992 that *could affect* the spotted owl or its habitat [47]. The court granted the preliminary injunction, which prohibited the BLM from permitting any land-altering activities to occur in connection with any 1992 timber sale that would either log suitable habitat or "may affect" the northern spotted owl [48]. On June 8, 1992, the court directed the BLM to prepare a Supplemental Environmental Impact Statement (EIS) to examine new data concerning the effects of logging on the northern spotted owl. The court also permanently enjoined any land-altering activities in connection with timber sales "not awarded prior to 1992" which would log suitable habitat or might affect the northern spotted owl [49].

On June 3, 1992, the Endangered Species Committee (ESC) by a vote of 5–2 issued a Notice of Decision, finding that 13 of 44 timber sales proposed by the BLM in western Oregon were exempt from the Endangered Species Act [50]. The ESC specifically found as to those 13 sales that:

1. There was no reasonable or prudent alternative,
2. The benefits of those 13 sales outweigh the alternatives consistent with preserving the species, the sales are in the public interest,
3. The sales are of regional interest, and
4. The BLM made no irreversible or irretrievable commitment of resources [51].

The key factor in granting the exemptions appears to have been the economic impact of the sales on the counties in which they are located. Factors the ESC considered significant were the relationship between direct timber jobs and non-timber jobs in a particular county, county-wide unemployment figures, and the relative reliance of counties' budgets on timber sales revenues [52]. The ESC specifically refused to issue a finding as to the adequacy of the BLM's environmental documentation under NEPA [53]. Thus, the NEPA ruling by the Oregon court is not directly impacted, although the BLM could, perhaps, assert a claim of functional equivalency tied to its exemption application. Until the EIS is supplemented, a functional equivalency determination is made, or the case is appealed or reconsidered, the NEPA injunction remains in effect. The economic findings of the ESC should also be compared to

the proposed legislation discussed below, concerning economic impact analyses — there will certainly be substantial controversy over the protection of listed species when balanced against the quality of human life.

Conflicts with endangered and threatened species are not limited to timber concerns of the Forest Service or the BLM. There is a real need to plan commercial activities to avoid conflicts with endangered or threatened species. The myriad of environmental permits required to perform nearly any type of industrial activity, such as running a power plant, building a hydroelectric dam, or constructing an oil and gas pipeline across several states will trigger the ESA. More and more often, the business community is aggressively managing this potential conflict, getting out in front of issues and resolving them to the benefit of both the environment and the business' operations. One way the business community is promoting environmental responsibility and signing up to continue their endeavors is by forming cooperative relationships with groups such as the Wildlife Habitat Enhancement Council, the Nature Conservancy and the National Institute for Urban Wildlife.

One recent success story resulted from the efforts of ARKLA, Inc. [54] in constructing a $40 million, 225-mile-long natural gas pipeline from Wilburton, Oklahoma to connect with a major north-south pipeline near Glendale, Arkansas. The pipeline, known as "Line AC," was planned to transverse habitat for three endangered species: the Red-Cockaded Woodpecker, the American Burying Beetle, and the Leopard Darter [55]. Aside from the requirement to comply with NEPA and write an environmental assessment as part of the Federal Energy Regulatory Commission Certification, ARKLA had to obtain a certificate of Environmental Compatibility and Environmental Need from the Arkansas Public Service Commission, which involved obtaining permits from roughly 23 agencies. A few of the agencies were the Army Corps of Engineers, the State Highway Department, the Arkansas Department of Pollution Control and Ecology, the State Historic Preservation Office, and the Arkansas Game and Fish Commission [56].

The source of the gas for Line AC, the Arkoma Basin, was discovered in the late 1980's. Work began on the project in the spring of 1989, and the line opened in November 1990. The opening was the result of "pre-environmental planning," avoiding potential pitfalls by factoring environmental concerns into the surveying and permitting, and construction of the project [57]. Several specific mitigation factors drew praise from regulatory agencies and public interest groups and mitigated potential environmental impacts.

The first two measures involved innovative strategy for crossing both the Cossatot River in Arkansas and the Mountain Fork River in Oklahoma. Although the basic route selection was planned to avoid environmental impacts (much of the pipeline is on commercial forests converted to pine plantations), if a detour was required to go around a river, it could cost as much as $50 million. Both rivers were environmentally sensitive. They are both state wild and scenic rivers and habitat for the endangered fish, the Leopard Darter. As a result, the line was suspended over both the Mountain Fork and the Cossatot

Rivers [58]. The Cossatot project included an extra feature, enclosing the pipe, both to keep it from view and to provide a bridge for handicapped access to the area's scenic trails [59].

In the negotiations with the state for the Cossatot crossing, ARKLA arranged a land donation as part of the package. ARKLA negotiators convinced private landowners, who owned a 160-acre tract near the state park and which the state had wanted to acquire for more than 10 years, to "buy into the dream," and sell the land to ARKLA [60]. ARKLA donated the land to the Arkansas Nature Conservancy, which donated it to the state to be included in the state park [61]. In a similar mitigation measure, ARKLA bought 1500 acres of forest and wetlands from Weyerhaeuser Company and donated it to the Oklahoma Nature Conservancy to compensate for about 1100 acres of woodland bird breeding ground that would be lost due to the destruction of a stand of mature trees [62].

As a result of factoring these environmental concerns into the pipeline process, ARKLA, Oklahoma, Arkansas, and the involved state and federal agencies all obtained "win–win" results. As a senior ARKLA official noted, "... companies are realizing that it impacts bottom line dollars if you are careless with environmental things" [63].

This type of success has resulted in expanding environmental awareness and the development of cooperative environmental programs to protect all wildlife, not merely endangered or threatened species. In 1988, the Wildlife Habitat Enhancement Council (WHEC) was established as a non-profit, *non-lobbying* organization whose purpose is to promote and nurture the enhancement of corporate property for the benefit of wildlife [64]. Corporations own from twenty-five to forty percent of the land in the United States, and over 165,000 acres currently are certified by the WHEC. The program certifies wildlife management plans and habitats at company sites. Once a company submits its application, the WHEC wildlife biologists review the plan to determine its eligibility. The company's commitment is an ongoing one — once certified, it must implement its habitat project within three years and remain active in the wildlife management program. Projects are reviewed every two years and recertified, if they continue to meet criteria [65].

Vulcan Materials' prototype wildlife habitat was the first corporate site certified as a wildlife habitat by the WHEC [66]. The Vulcan Materials project involved habitat for songbirds, wood ducks, and squirrels, a raptor management program, and butterfly and hummingbird gardens [67]. Vulcan now has five habitat sites in Virginia, and the company is developing projects in seventeen states and Mexico [68].

Twelve of the eighteen wildlife habitat sites certified by WHEC in November, 1990 were chemical company sites [69]. Projects include:

- A DuPont site in North Carolina. The program is isolated on 450 acres, and calls for creating a stocked pond, woodlands management, and a mowing schedule to complement habitat for wood ducks, quail, bluebirds and deer.

- An Amoco site in South Carolina, dedicating 6,500 acres to woodland management, including nesting boxes for purple martins and wood ducks, as well as nesting areas for wild turkeys and endangered least terns.
- A Monsanto site in Tennessee. The plan for this 5,000 acres includes creating a wetland over former tailings ponds, and nesting structures for Canadian Geese, bluebirds and wood ducks.
- A Texaco site in Texas. This 75 acres is specifically designed for mottled ducks.
- A Dow site in Ohio, involving restoration of native grasslands, nesting boxes for songbirds, wetlands creation, and wildlife education programs [70].

These cooperative projects and increasing sensitivities to environmental concerns by corporate managers indicate that wildlife concerns are becoming planning factors which will be built into corporate projects. The delays generated by the failure to obtain an environmental permit or an injunction forbidding oil and gas activities or lumber sales are seen as avoidable, if planning includes those issues. With the Endangered Species Act due for reauthorization, will additional items be added to environmental planners' checklists to avoid ESA impacts?

Although the battle has not been joined yet, the balance to be struck between economic impacts and endangered or threatened species impacts is certain to generate significant controversy [71]. The Endangered Species Act Amendments of 1992 (H.R. 4045) was introduced in November 1991, and it laid dormant while Congress was embroiled over reauthorizing the Resource Conservation and Recovery Act. Congress failed to pass either Act by the end of 1992. Although the bill, introduced by Representative Gerry E. Studds of Massachusetts, continued to gain sponsors through October of 1992, it failed to generate any committee hearings [72]. The battle lines were drawn when H.R. 4058, the Balanced Economic and Environmental Priorities Act of 1991, was introduced in December 1991 calling for the factoring of jobs and property values into the ESA processes [73], but it had less support and failed at the end of the 102nd Congress also.

H.R. 4045 contained several provisions which potentially would have generated controversy. The bill set hard dates for the completion of recovery plans under § 4(f) of the ESA. It required development and implementation plans for currently listed endangered and threatened species by December 31, 1996, and required recovery plans for species listed after 1992 to be developed and implemented within two years of the date of listing [74]. The recovery plans would have required integrated multispecies plans, provided the species were likely to benefit from an integrated plan, and the resolving conflicts between species conservation and economic activity was to be given priority [75]. The Secretary retained the authority not to develop a recovery plan if it would not have promoted conservation of the species. If this provision is included in future legislation it will be a tough one to meet, considering that 40 % of the recovery plans have not been completed and litigation, such as that over the RCW and northern spotted owl, could complicate drafting multispecies plans

[76]. Another section of the Act clearly authorized promulgation of regulations to carry out the Convention on the International Trade in Endangered Species (CITES) [77].

The Act also would have relaxed the 60-day notice currently required in citizen suits. In an emergency situation which posed a significant risk to the well-being of a listed species, a citizen suit could be filed immediately after notification to the Secretary [78].

Finally, the Act established a revolving fund for grants to state and local governments to develop conservation plans for candidate species [79]. To obtain funding, the state or local government would have had to enter a cooperative agreement with the Secretary committing to a long-term planning process, adequately funded, which would reasonably assure the survival of the species [80]. The Secretary would have been limited to advancing $500,000 in matching funds for any one plan [81]. Title IV increased funding authorizations through fiscal year 1997 in an attempt to provide the means to achieve the Act's goals [82].

The lofty goals, accelerated planning and inclusion of candidate species would have been offset by an economic balancing test if the legislation proposed by Representative Dannemeyer was included during the Committee process [83]. Under his proposal, a designation regulation, or recovery plan, could not have been enforced or implemented unless the Secretary had prepared an economic impact analysis [84]. To implement a listing or plan, the Secretary's analysis would have been required to determine that the "benefits of that designation, regulation or recovery plan outweigh the costs of that act," and an economic impact statement which described the analysis findings must have been published [85]. The economic impact analysis would have required statistics on the identifiable and potential job losses or decreases, the identifiable losses or decreases in the value of realty, and the losses or decreases in the value of businesses [86]. Additionally, the economic analysis would have reviewed the effect of the action on federal, state, or local tax revenues, the effect on other attributable costs to government entities, the effect on the competitive position of the industry, the ecological and economic impact of the extinction of the species, and any other factors the Secretary deemed appropriate [87]. Finally, if economic losses did result from ESA listings or regulations, the Secretary could have paid claims for economic losses. If a claim was denied, the claimant could have sued in federal district court [88].

Viewed in the harsh economic perspective of the times and the laborious history of the national forest timber offerings, any economic provision such as the one in H.R. 4045 will pose the greatest potential for extending the reauthorization of the ESA well into the next Congress — or beyond. Although H.R. 4045 died with the 102nd Congress, Representative Studds' subcommittee staff is hard at work on an updated version, and Senator Metzenbaum has already introduced an amendment to the ESA in the Senate [89]. Any ESA amendment will trigger the brutal choices of deciding between constituents'

jobs, the viability of national or regional industry, and the very existence of a species. Attempting to balance the economy with the environment will make for a long, drawn-out, emotional process. The role of the new Administration may say much about how President Clinton and Vice President Gore intend to balance their commitments to economic growth and environmental quality.

Acknowledgement

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72 Bill Tracking Report, Endangered Species Act Amendments of 1992, LEXIS (ENVIRON Library, BILLS file).
73 H.R. 4058, 102nd Cong., 1st Sess., Washington, DC, 1990.
74 H.R. 4045 (Version 2), 102nd Cong., 2nd Sess., § 101, Washington, DC, 1991.
75 *Id.* § 101(a).
76 Summary of Endangered Species Act Amendments of 1992, undated document, Committee on Merchant Marine and Fisheries, Washington, DC, 1992.
77 H.R. 4045, 102nd Cong., 2nd Sess., § 202, Washington, DC, 1991.
78 *Id.* § 201.
79 *Id.* § 301.
80 *Id.* § 301.
81 *Id.* § 301.
82 *Id.* §§ 401 and 402.
83 H.R. 4058, 102nd Cong., 1st Sess., Washington, DC, 1991.
84 *Id.* § 2.
85 *Id.* § 2.
86 *Id.* § 2.
87 *Id.* § 2.
88 *Id.* § 3.
89 S. 74, 103rd Cong., 1st sess., Washington, DC, 1993.