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THE IMPACT OF EUROPEAN COMMUNITY'S HUMANE TRAPPING RESOLUTION ON U.S. WILDLIFE DAMAGE CONTROL PROGRAM

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This paper discusses the implications that The European Economic Community's recent Wild Fur Regulation (WFR) might have on the U.S. wildlife damage control program. Beginning Jan. 1, 1995, the regulation will ban fur imports originating from countries which fail to (1) stop foothold trapping, and (2) adopt international humane trapping standards. Countries which pledge to adopt humane trapping standards will be granted a one-year extension to comply with the WFR. Because the European community is an important market for American furs, the regulation will affect the trapping of many American fur-bearing species, including raccoon, beaver, bobcat, muskrat, coyote, otter, badger, lynx, marten sable, and ermine.

Compliance send Non-compliance Effects of WFR

The WFR has become a critical issue for wildlife agencies since the resolution appears to be a *double-edged knife*. Banning foothold traps in response to WFR has important implications for the trapping industry, traditional trappers, forest and agricultural land owners. Failure to implement this resolution will also affect them in other ways.

Most longtime trappers primarily employ foothold trapping, and by complying with the resolution, many may be forced to quit trapping altogether. Already, some states -such as Massachusetts, New Jersey, Rhode Island, and Florida – have banned such trapping and observed such an effect. Those bans resulted in less overall trapping activity and an increased wildlife population which is becoming a nuisance. However, because of the relatively low average fur harvest in these states, the overall impact of these foothold trapping bans on fur supplies and fur species population may not be significant. Impact of such a ban in states like New York on fur supply and wildlife damage could be expected to be large.

On the other hand, failure to implement humane trapping standards or ban foothold trapping also will have severe direct and indirect economic repercussions. Noncompliance with the WFR will close the European fur market to U.S. fur and reduce fur prices, which in turn will create economic hardships for trappers, suppliers, dealers, fur buyers, and a large number of fur industry employees. Since fur trapping is a seasonal activity, private trappers who depend on its marginal income will be affected severely (Bishon. 1990).

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In the long-run, the WFR has an indirect impact on property owners. Federal and state officials consider fur trapping to be an effective means of regulating wildlife populations and wildlife damage to agricultural and forest lands. If WFR-regulated fur trapping is unprofitable, trapping activity will decline. In turn, furbearing animal populations will increase – even in areas where their numbers already require extreme regulatory management to avoid overpopulation. The current public wildlife management program could simply reduce to nothing more than a pest control program.

Wildlife Migration, Landowners Behavior And Management Implications

The low trapping pressure and the resulting increased wildlife nuisance activities likely will leave the responsibility of controlling their populations and damage to private land owners. However, the economic effectiveness of such control efforts by individual landowners depends on the population dynamics of wildlife species and management goals of individual landowners.

Some of furbearer populations are mobile in nature and have ability to reestablish. For instance, the experiences from isolated beaver control efforts have demonstrated that beavers from neighboring parcels tend to immigrate continually into less populated controlled parcels (Houston, 1987). Nuisance furbearer migration from uncontrolled to controlled parcels imposes a migration-related external cost, what is termed *diffusion externality*, on the owners of controlled parcels because they must incur the future costs of trapping immigrant

1992). The owners incurring trapping costs have no means to exclude neighbors from enjoying beaver control benefits. These problems of non-exclusion, and *diffusion externality* are typical features inherent in most common property resources, and decrease the cost effectiveness of trapping.

The level of control effort that the owners of furbearer-affected parcels exercise depends on which of three management scenarios they face (Shat 1991; Huffaker, Bhat and Lenhart, 1992). The owners of neighboring parcels may have mixed economic objectives. First, a neighboring parcel may be public/private land where wildlife populations are not viewed as a nuisance, and/or they are protected to provide recreational opportunities with absolutely no trapping. Under such circumstances, owners of wildlife-affected parcels face non-cooperation from their neighbors, and must exercise adequate control efforts unilaterally in the face of the negative diffusion externality.

Second, all landowners in a given watershed may consider wildlife as a common 'bad', and have a similar objective of controlling the nuisance problem. In this case, all the landowners need to collectively control the population over the entire habitat at the same time, which helps landowners internalize the *diffusion externality* (Bhat, Huffaker and Lenhart, 1993).

Finally, the adjacent land owners may have conflicting objectives. The furbearer populations may have different levels of damage potentials in the two adjacent parcels. Considering the example of beavers again, one of the parcels which is richer in vegetation may be highly prone to beaver damage even at a fairly very low level of

populations. On the other hand, the neighboring parcel which currently is poor in vegetation may benefit from a properly regulated beaver population, through their ability to create and restore wetland. This landowner's goal is to maintain relatively higher stock of beaver population which might conflict with the interest of the neighboring landowner as the higher population pressure on this parcel could lead to influx of excess beavers to the neighboring less populated parcel. Even under such circumstances, there is a scope for developing a cooperative control program with careful consideration of each others management objectives. As often found in transboundary fishery resources management, this cooperation could take place through a process of bargaining and contracting between landowners as to the level and time of harvesting by each

Concluding Remarks

The WFR is a strong articulation of an international call for humane trapping and holds a significant potential for affecting the future of already suffering U.S. fur trapping industry and property owners. Now it is time for wildlife agencies, private landowners, and the trapping industry to coordinate their efforts toward public education, trapper education, and research and to develop humane trapping methods, lest they lose one of the fur industry's biggest markets.

Simultaneously, from the property owners point of view, it is important to understand the biological behavior of the furbearer species in order to minimize the migration-related external costs of controlling their populations. Wildlife agency could play a major role in educating landowners and

exploring the possibility of organized, concurrent trapping efforts among landowners, capturing both the biological and economic aspects of wildlife migratory species.

REFERENCES

Bhat, M. G. *Controlling Wildlife Damage by Diffusing Beaver Population: A Bioeconomic Application of the Distributed Parameter Control Model*. Unpublished Ph.D. Dissertation, University of Tennessee, Knoxville, TN, December 1991.

Bhat, M. G., R. G. Huffaker and S. M. Lenhart. "Controlling Forest Damage by Dispersive Beaver Populations: Centralized Optimal Management Strategy." *Ecological Applications*. 1993 (forthcoming).

Bishop, Paul G. *Traps, Trapping and Furbearer Management in New York State*. Departmental Publication of the New York State Department of Environmental Conservation, June 1990.

A. Houston. *Beaver control and reclamation of beaver-kill sites with planted hardwoods*. Unpublished Report, 1987.

Huffaker, R. G.; M. G. Bhat, and S. M. Lenhart. "Optimal Trapping Strategies for Diffusing Nuisance-Beaver Populations." *Natural Resources Modeling*, Vol. 6(1), Winter 1992.