

Foreword

America is under siege by invaders from planet earth. Species alien to our ecosystems—introduced from their natural range by both intentional and unintentional human activity—are spreading at ever-increasing rates throughout our lands and waters. Future ecosystem health and productivity are at risk from these alien invasions unless we move swiftly. Key to our success will be to share critical information about the prevention and control of invasive species before the damage is irreversible.

For those of us engaged in protecting the health and productivity of our nation's lands and water resources, biological invasions represent both an ecological and an economic nightmare. The costs of controlling alien species are rapidly increasing to the detriment of the nation's productive capacity at a time when increasing efficiencies are needed to remain competitive in world markets. Moreover, alien biological invaders are radically transforming familiar marine and aquatic communities by out competing, killing or infecting native species, and dominating important ecosystems.

Preventing and controlling biological invasions is a formidable task. Our success will depend upon vastly improving our understanding of invading species and pathways of introduction and upon the development of new technologies to combat them. Both will require improving information sharing among affected groups: governmental resource management agencies, commercial interests, private entities, and academia. Underlying much of the policy debate is a simple fact: information sharing between countries involved in international trade and between institutions such as natural resource management agencies and private ranchers and farmers is too rudimentary. Resource managers and scientists are calling for more and better data to improve risk assessments and screening and to help develop effective and efficient on-the-ground management programs. By sharing information with other government professionals and nongovernmental organizations and the private sector, decision making and action will be greatly enhanced and the tide may be turned against biological invaders.

That is the purpose underlying a recent workshop convened on behalf of the Departments of the Interior, Agriculture, and Commerce in collaboration with the Charles Valentine Riley Memorial Foundation. On-line demonstrations and expert panels provided an opportunity for professionals in widely diverse fields of science and management to meet for the first time to apply their skills to the problem of invasive species. By exchanging information on how various database systems have been developed in the past, these federal, state, and non-governmental participants agreed on the need for linking and exploring applied uses of databases. Future demonstrations will focus on the economic and scientific value of shared data directed at specific practical uses.

The recently signed Executive Order on Invasive Species offers new opportunities for stakeholder involvement in crafting a national invasive species management plan for the future. The results of this workshop represent a significant step toward that lofty goal. With decisive and cooperative actions, we can both raise public awareness of the need for improved data sharing and begin to share the information needed to arrest the damage caused by these biological invasions.

William Y. Brown
Science Advisor to
Secretary of the Interior

Richard E. Rominger
Deputy Secretary
U.S. Department of Agriculture

D. James Baker
Under Secretary
U.S. Department of Commerce