

Cultural Impacts of Biological Invasions: An Ethnobiological Perspective. (Oral Presentation)

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Introduction

Study of the ecological and economic impacts of invasive (e.g., non-native, alien, exotic, weedy) species has paralleled their progressively pervasive influence on ecosystems worldwide, yet little attention has been paid to their cultural impacts. Unlike biological systems where the ecological impacts of invasive species are primarily negative – and in many situations, apparently irreversible; from an ethnoscientific standpoint, invasive species' impacts on cultural systems appear to span a continuum of both positive and negative effects.

Objectives

Our work represents an interdisciplinary analysis of the cultural, social, spiritual, and ethical consequences of biological invasions among indigenous societies.

Methods

By comparing historical and current data on cross-cultural introductions of non-native plants, we propose a conceptual framework delineating the differential cultural impacts of invasive species. In the case of culturally enriching invasive species, the incorporation of non-native flora and fauna into local cuisines, pharmacopeias, rituals, and other traditional practices has resulted in cultural expansion as new species are adopted and new traditions generated.

Results

In contrast, the appearance of culturally impoverishing species in local environments has led to cultural contraction, i.e., the displacement of culturally important native species and associated traditions.

Conclusion

An understanding of the processes by which non-native biota become culturally enriching or culturally impoverishing can contribute to articulating interdisciplinary programs aimed at simultaneously conserving biological and cultural diversity.

Selected References

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