

Ecological Control of Exotic Plants

Robert M. Dixon and Ann B. Carr
Imprinting Foundation
Tucson AZ 85718

Exotic annuals and short-lived perennials play a beneficial role in the ecological restoration of land areas degraded by a variety of human activities. Although such exotics are often viewed as weeds to be killed by herbicidal and mechanical means, they may also be treated as pioneer plants or the first and essential stage of secondary succession following land disturbance. These exotics perform important ecological functions much like their nature counterparts in accelerating the secondary succession of plant communities toward the desired late seral stage. Exotics can serve as cover, nurse, mulch and green manure plants to generally improve the microenvironment for subsequent seral stages, the plants of which displace the exotic annuals and short-lived perennials. Seeds of such exotics are usually retained by the restored ecosystem awaiting another land disturbance and another opportunity to become the dominant vegetation. Thus restoration of degraded land areas should be directed to maximizing the beneficial ecological functions of early seral exotics.