Spartina anglica

Common cord grass, rice grass, townsends grass

Threat scores

1. Ecological impact
   - "Its invasion and spread leads to the exclusion of native plant species and the reduction of suitable feeding habitat for wildfowl and waders. Used for erosion control, livestock feed and green manure" (Molnar 2008).
   - Increases sedimentation.
   - Invades mudflats rich in invertebrates and used by overwintering shorebirds and waterfowl; Replaces more diverse plant communities (Molnar 2008).
   - Produces dense, monotypic stands that alter succession and are replaced in ungrazed areas by equally species-poor communities
   - Promotes agricultural reclamation that results in the destruction of species-rich salt marsh habitats.
   - Dense infestations at river mouths lead to decreased flow and increased flooding.
2. Invasive potential
   - Potential for transport in ships ballast, on migrating birds, intentional for coastal protection and land reclamation schemes, and natural dispersal (Molnar 2008).
   - Seeds spread on wind and in water.
3. Geographic extent
   - Locally pervasive
4. Management difficulty
   - Smothering and repetitive burning are effective on small infestations. Complete eradication requires repeated treatments. No known eradications of large, spreading infestations.

Geography and Habitat

1. Origin: The natural distribution of S. anglica is thought to be between Poole, Dorset, and Pagham, Sussex and possibly northern France.
2. A hybrid between the British Spartina maritima and the North American S. alterniflora, S. anglica originated on the British coast in the nineteenth century,
3. Estuaries/bays, wetlands, intertidal zones

Invasion Pathways

1. Natural Spread
   - Known
   - Cause- range expansion
   - Spartina has also spread naturally. At many sites it remained dormant as seeds for a number of years then showed a considerable expansion over a relatively short period.
2. Climate change
   - Accidental probable
   - Cause- climate change
   - The availability of mud flats for colonization, change in sediment patterns, tidal regimes and climate (it appears less able to set viable seed in colder climates) have influenced its spread (Molnar 2008).

3. Plant Parts
    - Intentional known
    - S. anglica is also used as green manure in China; 50 kg of S. anglica are approximately equivalent to 0.5 kg of urea (Chung 1982).
4. Natural Spread
    - Known
    - Spreads in mud attached to waterfowl

Non native locations

1. 56- Puget Trough/Georgia Basin
2. 57- OR, WA, Vancouver Coast and Shelf
3. 58- Northern California

Sources

1. Molnar, Jennifer, et al. 2008. "Assessing the global threat of invasive species to marine biodiversity." *Frontiers in Ecology and the Environment*. 6 (9), pp. 485-492.
2. http://conserveonline.org/workspaces/global.invasive.assessment
3. http://upload.wikimedia.org/wikipedia/commons/c/cd/Spartina_anglica.jpg