# Additional file 2: Classification of interventions

This hierarchical classification scheme aims to capture all relevant management interventions that could be used to manage or prevent the spread of invasive plant species.

**All interventions**

1. Invasive species management
   1. Invasion prevention
      1. Surveillance
         1. Monitoring species/vectors/pathways (vs control)
         2. Monitoring species/vectors/pathways using a different method/tool
      2. Border control (preventing high-risk species/vectors from crossing the border)
         1. Customs inspections (vs control)
         2. Customs inspections using a different method/tool
      3. Quarantine
         1. Quarantining (vs control)
         2. Quarantining using a different method/tool
   2. Invasive plant management
      1. Biological control of invasive plants
         1. Biological control of invasive plants (vs no biological control)
         2. Using a different method/tool/species for biological control of invasive plants
      2. Chemical control of invasive plants
         1. Chemical control of invasive plants (vs no chemical control)
            1. Using a herbicide or mixture of herbicides
         2. Using a different method/tool/chemical for chemical control of invasive plants
            1. Using a different amount of herbicide
            2. Using a different method of applying herbicide
            3. Using a different type of herbicide or mixture of herbicides
      3. Physical/mechanical control of invasive plants
         1. Physical/mechanical control of invasive plants (vs no physical/mechanical control)
            1. Burning invasive plants (also see "burning" in "habitat management" for habitat-wide interventions)
            2. Cutting/chopping invasive plants (also see "mowing" for habitat-wide interventions)
            3. Uprooting/removing invasive plants (also see "plowing" for habitat-wide interventions)
         2. Using a different method/tool for physical/mechanical control of invasive plants
      4. Integrated control of invasive plants, n.e.c.
         1. Integrated control of invasive plants (vs no integrated control)
            1. Cutting and using a herbicide or mixture of herbicides
         2. Integrated control of invasive plants using a different method/tool/species
   3. Invasive pathogen management (e.g. bacteria, fungi, and viruses)
      1. Biological control of pathogens
         1. Biological control of pathogens (vs no biological control)
         2. Using a different method/tool/species for biological control of pathogens
      2. Chemical control of pathogens
         1. Chemical control of pathogens (vs no chemical control)
            1. Using a fungicide or mixture of fungicides
         2. Using a different method/tool/chemical for chemical control of pathogens
            1. Using a different amount of fungicide
            2. Using a different method of applying fungicide
            3. Using a different type of fungicide or mixture of fungicides
      3. Physical/mechanical control of pathogens
         1. Physical/mechanical control of pathogens (vs no physical/mechanical control)
            1. Removing infected organisms from the area
         2. Using a different method/tool for physical/mechanical control of pathogens
      4. Integrated control of invasive pathogens, n.e.c.
         1. Integrated control of invasive pathogens (vs no integrated control)
         2. Integrated control of invasive pathogens using a different method/tool/species
   4. Invasive invertebrate management (e.g. insects and mites)
      1. Biological control of invertebrates
         1. Biological control of invertebrates (vs no biological control)
         2. Using a different method/tool/species for biological control of invertebrates
      2. Chemical control of invertebrates
         1. Chemical control of invertebrates (vs no chemical control)
         2. Using a pesticide or mixture of pesticides
         3. Using chemical attractants/traps (e.g. pheromone traps)
         4. Using chemical deterrents
         5. Using a different method/tool/chemical for chemical control of invertebrates
         6. Using a different amount of pesticide
         7. Using a different method of applying pesticide
         8. Using a different type of pesticide or mixture of pesticides
      3. Physical/mechanical control of invertebrates
         1. Physical/mechanical control of invertebrates (vs no physical/mechanical control)
         2. Destroying/removing invertebrates using physical force
         3. Using pressurized sprays (e.g. water cannons)
         4. Using physical/mechanical traps (e.g. sticky traps)
         5. Excluding invertebrates (e.g. using netting or other barriers)
         6. Repelling/deterring invertebrates (e.g. using copper bands against slugs or other physical deterrents)
         7. Using a different method/tool for physical/mechanical control of invertebrates
      4. Integrated control of invasive invertebrates, n.e.c.
         1. Integrated control of invasive invertebrates (vs no integrated control)
         2. Integrated control of invasive invertebrates using a different method/tool/species
   5. Invasive vertebrate management (e.g. birds and mammals)
      1. Biological control of vertebrates
         1. Biological control of vertebrates (vs no biological control)
         2. Using a different method/tool/species for biological control of vertebrates
      2. Chemical control of vertebrates
         1. Chemical control of vertebrates (vs no chemical control)
         2. Using a poison or mixture of poisons
         3. Using chemical attractants/traps (e.g. pheromone traps)
         4. Using chemical deterrents
         5. Using a different method/tool/chemical for chemical control of vertebrates
         6. Using a different amount of poison
         7. Using a different method of applying poison
         8. Using a different type of poison or mixture of poisons
      3. Physical/mechanical control of vertebrates
         1. Physical/mechanical control of vertebrates (vs no physical/mechanical control)
         2. Destroying/removing vertebrates using physical force
         3. Excluding/repelling vertebrates
         4. Using a different method/tool for physical/mechanical control of vertebrates
      4. Integrated control of invasive vertebrates, n.e.c.
         1. Integrated control of invasive invertebrates (vs no integrated control)
         2. Integrated control of invasive invertebrates using a different method/tool/species
         3. Integrated management, n.e.c.
   6. Early detection and rapid response (EDRR), n.e.c.
      1. Early detection and rapid response (EDRR) (vs control)
      2. Early detection and rapid response (EDRR) using a different method/tool
   7. Invasive species management, n.e.c.
2. Habitat management
   1. Managing plant communities
      1. Planting (e.g. reseeding with native species)
         1. Planting (vs control)
         2. Planting using a different method/tool/species
      2. Burning
         1. Burning (vs control)
         2. Burning using a different method/tool
         3. Burning at a different time or with a different frequency
      3. Grazing
         1. Grazing (vs control)
         2. Grazing using a different method/tool/species
            1. Excluding grazers (e.g. using fencing)
            2. Grazing at a different time or with a different frequency (e.g. seasonal grazing vs continuous grazing)
            3. Using a different number of grazers (e.g. lower stocking rates)
            4. Using a different species of grazer (e.g. traditional breeds)
      4. Mowing
         1. Mowing (vs control)
         2. Mowing using a different method/tool
            1. Mowing at a different time or with a different frequency
            2. Mowing at a different height
      5. Managing habitat features
         1. Providing structures/features for wildlife
            1. Providing structures/features for wildlife (vs control)
            2. Providing perches (e.g. for birds)
            3. Providing cavities (e.g. nest boxes)
            4. Providing soil features for wildlife (e.g. beetle banks)
            5. Providing water features for wildlife (e.g. ponds)
            6. Providing structures/features for wildlife using a different method/tool/material
      6. Retaining habitats in the surrounding area
         1. Retaining artificial habitats (e.g. old buildings or walls)
            1. Retaining artificial habitats (vs control)
            2. Retaining artificial habitats using a different method/tool
         2. Retaining semi-natural habitats (e.g. riparian areas)
            1. Retaining semi-natural habitats (vs control)
            2. Retaining semi-natural habitats using a different method/tool
   2. Restoring habitats, n.e.c.
      1. Restoring artificial habitats (e.g. old buildings or walls)
         1. Restoring artificial habitats (vs control)
         2. Restoring artificial habitats using a different method/tool/material
      2. Restoring semi-natural habitats (e.g. riparian areas)
         1. Restoring semi-natural habitats (vs control)
      3. Restoring semi-natural habitats using a different method/tool/species
   3. Habitat management, n.e.c.
3. Species management (non-invasive species; e.g. natural enemies of invasive species)
   1. Providing resources for wildlife
      1. Providing food for wildlife (also see "habitat management")
         1. Providing food for wildlife (vs control)
         2. Providing food for wildlife using a different method/tool/food
   2. Species management, n.e.c.
4. Soil, land, and water management
   1. Preparing the land for planting or building
      1. Clearing the land (e.g. using bulldozers to scrape away the vegetation)
         1. Clearing the land (vs control)
         2. Clearing the land using a different method/tool
      2. Landscaping (e.g. making terraces or digging drainage ditches)
         1. Landscaping (vs control)
         2. Landscaping using a different method/tool
      3. Plowing
         1. Plowing (vs control; i.e. vs no tillage)
         2. Plowing using a different method/tool
      4. Fertilizing and irrigating
         1. Fertilizing/amending the soil
            1. Fertilizing/amending the soil (vs control)
            2. Fertilizing/amending the soil using a different method/tool/material
         2. Irrigating
            1. Irrigating (vs control)
            2. Irrigating using a different method/tool/source of water
   2. Soil, land, and water management, n.e.c.