

Exotic and Invasive Species of Southeast Alaska and Adjacent British Columbia

| Common Name | Scientific Name | Distribution | On an Island? | TNF District | ADFG GMU | Comments | References |
|---|---|---|---------------|---|------------------|--|---|
| VASCULAR PLANTS At least 135 exotic plant species have now been documented in southeast Alaska (Lamb & Shephard 2007). Twenty-four of the most invasive alien species are presented below. Invasive plants are expected to increase and expand in the region as road networks and other human activities increase and expand, and changes in climate occurs (Schrader and Hennon 2005). On Haida Gwaii, some 143 plant species are considered introduced to the islands, several of which are considered invasive (Lomer and Douglas 1998; Columbia 2000). | | | | | | | |
| bull thistle | <i>Cirsium vulgare</i> | Many sites on Prince of Wales I., and near the towns of Gustavus, Haines, Ketchikan, Wrangell, and Metlakatla. | Y | Thorne Bay, Craig, Ketchikan and Wrangell RDs | GMU 1ABCD, 2 | A Native to Europe, western Asia, and northern Africa, it competes with native species for water, nutrients, and space, and displacing native species. | Schrader and Hennon (2005); ANHP (2006) |
| Canada thistle | <i>Cirsium arvense</i> | Very abundant around Haines; widely distributed on Prince of Wales Island; expanding range now includes Petersburg, Ketchikan, Wrangell, and Sitka. | Y | Thorne Bay, Craig, Petersburg, Wrangell, Ketchikan, and Sitka RDs | GMU 1AB, 2, 3, 4 | Threatens coastal meadows and riparian areas. | Schrader and Hennon (2005) |
| garlic mustard | <i>Alliaria petiolata</i> | Currently restricted to Juneau area | N | Juneau RD | GMU 1C | Often dominates the understory in forested areas and out-competes native species; readily spreads into undisturbed forests and species-rich sites. | Schrader and Hennon (2005); ANHP (2006) |
| non-native yellow-flowered hawkweeds (chickweeds) | <i>Hieracium</i> spp. | Currently found near Juneau, Petersburg, and Wrangell. One species (<i>H. pilosella</i>) occurs on Prince of Wales I. | Y | Juneau, Petersburg, Wrangell, and Craig/Thorne Bay RDs | GMU 1BC, 2, 3 | These non-native plants are widely scattered in Alaska and Yukon Territory. | Schrader and Hennon (2005); ANHP (2006) |
| Japanese/giant knotweed | <i>Polygonum cuspidatum</i> / <i>P. sachalinense</i> | Species and hybrids now established around most towns in the region. | Y | Region-wide | Region-wide | Found on roadsides, stream banks, and beach meadows. Known to clog waterways and reduce quality habitat for aquatic wildlife. | Schrader and Hennon (2005); ANHP (2006) |
| perennial sowthistle | <i>Sonchus arvensis</i> | Reported from Gustavus, Haines, Hoonah, Ketchikan, Juneau, and Admiralty and Prince of Wales islands. | Y | Hoonah, Ketchikan, Juneau, and Craig/Thorne Bay RDs | GMU 1ACD, 2, 4 | Threatens native beach grass communities. Host to a number of plant pests. Also reported in s-c and c Alaska. | Schrader and Hennon (2005); ANHP (2006) |
| ornamental jewelweed | <i>Impatiens glandulifera</i> | Documented in Haines and Juneau. | N | Juneau RD | GMU 1C, D | Invading undisturbed beach fringes. Also recorded in Anchorage. | Schrader and Hennon (2005); ANHP (2006) |
| reed canarygrass | <i>Phalaris arundinacea</i> | Widely distributed across the region; extremely prevalent in wetlands in Juneau, Wrangell, Petersburg, and on Prince of Wales and outer islands, including Warren and Dall. | Y | Region-wide | Region-wide | Highly invasive, forming dense, persistent, monotypic stands in wetlands. Was used throughout southeast Alaska to stabilize road banks. | Schrader and Hennon (2005) |
| spotted knapweed | <i>Centaurea biebersteinii</i> | Currently found near Haines, Kake, Ketchikan, and along roads on Prince of Wales Island. Successfully eradicated from Dyea. | Y | Petersburg, Ketchikan, Craig/Thorne Bay RDs | GMU 1AD, 2, 3 | Invades riparian areas, and an enormous problem elsewhere. | Schrader and Hennon (2005) |
| tansy ragwort | <i>Senecio jacobaea</i> | Found in vicinities of Ketchikan, Kake, Wrangell, and on Prince of Wales I. | Y | Ketchikan, Wrangell, Petersburg, and Craig/Thorne Bay RDs | GMU 1AB, 2, 3 | Toxic to livestock and humans; invades coastal meadows. Also reported from Anchorage. | Schrader and Hennon (2005); ANHP (2006) |

Exotic and Invasive Species of Southeast Alaska and Adjacent British Columbia

| Common Name | Scientific Name | Distribution | On an Island? | TNF District | ADFG GMU | Comments | References |
|---------------------------------|--------------------------------------|--|---------------|--|--------------------|---|---|
| white/yellow sweetclover | <i>Melilotus alba/M. officinalis</i> | Widely distributed along roadways in the region, and now established along long stretches of the Stikine R. | Y | Region-wide | Region-wide | An aggressive invader that spreads quickly along riparian areas, riverbanks, and roadways. | Schrader and Hennon (2005) |
| yellow toadflax (butter & eggs) | <i>Linaria vulgaris</i> | Well established along roadways in Juneau, Haines and Skagway. | N | Juneau RD | GMU 1CD | An aggressive invader that forms dense, suppressive colonies. | Schrader and Hennon (2005) |
| orange hawkweed | <i>Hieracium aurantiacum</i> | Established along road systems of Haines, Juneau, Ketchikan, Petersburg, Sitka, Wrangell, and Prince of Wales Island | Y | Juneau, Ketchikan, Petersburg, Sitka, Wrangell, and Craig/Thorne Bay RDs | GMU 1ABCD, 2, 3, 4 | Capable of aggressive invasion along beaches and rivers. | Schrader and Hennon (2005) |
| common tansy | <i>Tanacetum vulgare</i> | Reported from Gustavus, Haines, Juneau, Kake, Petersburg, Sitka, Skagway, Wrangell, and Prince of Wales Island. | Y | Juneau, Petersburg, Sitka, Wrangell, and Craig/Thorne Bay RDs | GMU 1BCD, 2, 3, 4 | A European invasive found along roadways, rivers and stream banks. Has become established in beach meadows near Haines. | Schrader and Hennon (2005); ANHP (2006) |
| ox-eye daisy | <i>Leucanthemum vulgare</i> | Now common throughout the region. | Y | Region-wide | Region-wide | Aggressive invader along roadsides, disturbed areas, and beach meadows. | Schrader and Hennon (2005) |
| spotted catsear | <i>Hypochaeris radicata</i> | Reported from Ketchikan, Hoonah, Petersburg, Wrangell, Sitka; extensive on Prince of Wales I. | Y | Ketchikan, Petersburg, Wrangell, Sitka, Hoonah, and Craig/Thorne Bay RDs | GMU 1AB, 2, 3, 4 | Roadsides, disturbed areas, meadows. | Schrader and Hennon (2005) |
| scotchbroom | <i>Cytisus scoparius</i> | This exotic invasive has now escaped cultivation and now established on Prince of Wales Island, and in Ketchikan, Petersburg, Sitka, and Hoonah. Has also been found on Heceta Island. | Y | Ketchikan, Petersburg, Sitka, Hoonah, and Craig/Thorne Bay RDs | GMU 1A, 2, 3, 4 | A woody shrub that forms dense stands along forest edges, clearings, and meadows. | Schrader and Hennon (2005) |
| black medick | <i>Medicago lupulina</i> | Extensive on Prince of Wales Island; in Ketchikan and Kake. | Y | Ketchikan, Petersburg, and Craig/Thorne Bay RDs | GMU 1A, 2, 3 | Known to establish in undisturbed areas, and is an alternate host for a number of viruses. Has been recorded from all eco-geographic regions in Alaska | Schrader and Hennon (2005); ANHP (2006) |
| sweetrocket | <i>Hesperis matronalis</i> | Reported from Ketchikan, Juneau, and Wrangell. | Y | Juneau, Ketchikan, and Wrangell RDs | GMU 1ABC | Grows in moist to mesic woodlands and meadows, along roadsides, and in open areas. Competes with native species and is an alternate host for number of viruses. | Schrader and Hennon (2005); ANHP (2006) |
| common St. Johnswort | <i>Hypericum perforatum</i> | Reported from Hoonah, Ketchikan, Petersburg, Sitka, and Prince of Wales Island. | Y | Ketchikan, Petersburg, Sitka, Hoonah, and Craig/Thorne Bay RDs | GMU 1A, 2, 3, 4 | Establishes along roadsides and in disturbed sites that includes logged areas. | Schrader and Hennon (2005); ANHP (2006) |

Exotic and Invasive Species of Southeast Alaska and Adjacent British Columbia

| Common Name | Scientific Name | Distribution | On an Island? | TNF District | ADFG GMU | Comments | References |
|----------------------------------|--------------------------------|--|---------------|----------------------|-----------------|--|---|
| TERRESTRIAL INVERTEBRATES | | | | | | | |
| giant gardenslug | <i>Limax maximus</i> | Eurasian and North African exotic introduced to Haines area, Juneau, and several other towns in Southeastern | Y | Juneau RD, others | GMU 1CD, others | A large, dark, nocturnal slug that eats mainly fungi and decaying plant matter | USFS (2007); Forsyth (pers. comm.) |
| hedgehog arion (slug) | <i>Arion intermedius</i> | European exotic found on Haida Gwaii and Vancouver Island | Y | | | | Forsyth (2004) |
| chocolate arion (slug) | <i>Arion rufus</i> | European exotic introduced to Haida Gwaii | Y | | | | Forsyth (2004) |
| dusky arion (slug) | <i>Arion subfuscus</i> | European exotic introduced to Haida Gwaii | Y | | | | Forsyth (2004) |
| gray fieldslug | <i>Deroceras reticulatum</i> | Wide-spread exotic found on Haida Gwaii | Y | | | | Forsyth (2004) |
| garlic glass-snail | <i>Oxychilus alliarius</i> | Western European exotic introduced to Haida Gwaii | Y | | | | Forsyth (2004) |
| spruce aphid | <i>Elatobium abietinum</i> | Spruce aphids occur throughout southeast Alaska and have been on the rise in the region since the 1990s. Outbreaks are usually preceded by mild winters. | Y | Region-wide | Region-wide | Originally from Europe, these insects became established throughout west coast Sitka spruce forests by 1927, and southeast Alaska by the 1930s. | Juneau Empire archives; USFS (2007) |
| birch leafminer | <i>Fenusa pusilla</i> | Haines-Skagway area | N | Juneau RD | GMU 1D | A native of Europe; also reported from some areas in southcentral and central Alaska | McClory & Gotthardt (2008) |
| western tent caterpillar | <i>Malacosoma californicum</i> | Recently found in southeast Alaska at Hyder. | N | Ketchikan RD | GMU 1A | This potentially devastating invasive west coast forest pest was first reported (and evidently eradicated) in Anchorage in 1998 and again in 2003. | USFS (2003, 2007); McClory & Gotthardt (2008) |
| European yellow underwing moth | <i>Noctua pronuba</i> | First discovered in Haines and St. Lazaria Island in 2005; confirmed throughout southeast Alaska in 2006, including Sitka, Prince of Wales Island, Thorne Bay, Juneau, and Ketchikan. In 2007, it was found in Wrangell and Skagway. | Y | Region-wide | Region-wide | The larvae are generalist feeders and have been recorded on grasses, dock and dandelions, and a wide range of wild and cultivated herbaceous plants. | USFS (2007) |
| AMPHIBIANS | | | | | | | |
| Pacific chorus frog | <i>Pseudacris regilla</i> | Ward Lake area, Revillagigedo I. | Y | Ketchikan RD | GMU 1A | One record from Annette Island. Unconfirmed reports of occurrence near Hyder and Barnes Lake area, Stikine River (native?) | MacDonald & Cook (2007) |
| red-legged frog | <i>Rana aurora</i> | Freshwater Bay area, Chichagof I. | Y | Sitka RD | GMU 4 | Exotic populations expanding | MacDonald & Cook (2007) |
| roughskin newt | <i>Taricha granulosa</i> | Sitka and Juneau areas | Y | Juneau and Sitka RDs | GMU 1C, 4 | Translocated native species | MacDonald & Cook (2007) |

Exotic and Invasive Species of Southeast Alaska and Adjacent British Columbia

| Common Name | Scientific Name | Distribution | On an Island? | TNF District | ADFG GMU | Comments | References |
|-------------------|------------------------------|--|---------------|--|-----------------|--|--|
| FISH | | | | | | | |
| Atlantic salmon | <i>Salmo salar</i> | Escapees from salmon farms in British Columbia are increasingly appearing in southeast Alaska waters, both salt and fresh. | Y | Region-wide | Region-wide | Total number of Atlantic salmon estimated annually in southeast Alaska has been increasing in recent years from several hundred to a few thousand, with the majority of recoveries from around Ketchikan and Petersburg. | ADFG (2002) |
| brook trout | <i>Salvelinus fontinalis</i> | Non-native stocked in southeast Alaska rivers, streams and lakes between 1917 and 1950. Few survived except in some lakes, primarily subalpine, among them Green, Heart, Thimbleberry, and Long lakes near Sitka; Crystal Lake near Petersburg; Grace, Ketchikan, Shelocum, and Perseverance lakes in the Ketchikan area; Emerald (Texas) Lake near Hyder; Lower and Upper Dewey lakes near Skagway; Rustabach Lake near Haines; and Salmon Creek Reservoir near Juneau. | Y | Ketchikan, Petersburg, Juneau, and Sitka RDs | GMU 1ABCD, 3, 4 | Generally where brook trout have become established, native dolly varden (<i>Salvelinus malma</i>) are not found. | Schmidt (1994); Schrader and Hennon (2005) |
| arctic grayling | <i>Thymallus arcticus</i> | Stocked in a number of lakes in the region, including Antler Lake near Juneau; Big Goat, Tyee, and Manzoni lakes in the Ketchikan vicinity; and several on Prince of Wales Island. | Y | Juneau, Ketchikan, Craig/Thorne Bay RDs | GMU 1AC, 2 | | Gurney (2006) |
| northern pike | <i>Esox lucius</i> | Established in a series of small ponds in the Ahrnklin River drainage near Yakutat. | N | Yakutat RD | GMU 5A | A species of greatest immediate concern in the Alaska Aquatic Nuisance Species Management Plan. | Fay (2002); Schrader & Hennon (2005) |
| BIRDS | | | | | | | |
| rock dove | <i>Columba livia</i> | Primarily in cities and towns of region | Y | Region-wide | Region-wide | Established resident | Schrader & Hennon (2005) |
| house finch | <i>Passer domesticus</i> | Casual in southeast Alaska at Petersburg, with most records from Ketchikan | Y | Ketchikan and Petersburg RDs | GMU 1A, 3 | Not yet established | West (2008) |
| European starling | <i>Sturnus vulgaris</i> | Found primarily near the cities and towns of the region | Y | Region-wide | Region-wide | Established resident | West (2008) |

Exotic and Invasive Species of Southeast Alaska and Adjacent British Columbia

| Common Name | Scientific Name | Distribution | On an Island? | TNF District | ADFG GMU | Comments | References |
|----------------------------|--------------------------------|---|---------------|---|---------------|--|--|
| TERRESTRIAL MAMMALS | | | | | | | |
| American beaver | <i>Castor canadensis</i> | (re?)introduced to Baranof island; also Haida Gwaii | Y | Sitka RD | GMU 4 | (re?)established population | MacDonald and Cook (2007) |
| red squirrel | <i>Tamiasciurus hudsonicus</i> | Translocated to Baranof, Chichagof, and Admiralty islands. Now also present on Inian, Kruzof, Moser, Partofshikof, and Yakobi islands. Non-native populations have become established on at least 11 islands in the Haida Gwaii archipelago | Y | Hoonah and Sitka RDs, and Admiralty NM | GMU 4 | There was an unsuccessful attempt to transplant red squirrels to Prince of Wales Island in 1931 | MacDonald and Cook (2007); Nagorsen (2005) |
| common muskrat | <i>Ondatra zibethicus</i> | Successfully introduced to Haida Gwaii in the 1920s. | Y | | | Unsuccessful attempts in 1929 to introduce muskrats to Prince of Wales island | MacDonald and Cook (2007); Nagorsen (2005) |
| house mouse | <i>Mus musculus</i> | Documented from Wrangell, Sitka, and Juneau; also on Moresby Island, Queen Charlottes, and at Prince Rupert, mainland BC | Y | Wrangell, Sitka, and Juneau RDs | GMU 1BC, 4 | Recently captured near Juneau; current status elsewhere unknown | MacDonald and Cook (2009) |
| brown rat | <i>Rattus norvegicus</i> | Records from Sitka, Juneau, Douglas, Ketchikan, and Petersburg; also still present on Graham, Kunghit and Moresby islands in Haida Gwaii | Y | Sitka, Juneau, Ketchikan and Petersburg RDs | GMU 1AC, 3, 4 | | MacDonald and Cook (2007); Nagorsen (2005) |
| roof rat | <i>Rattus rattus</i> | Originally a species of India and SE Asia, black rats now occur on at least 10 islands in the Haida Gwaii archipelago | Y | | | Many seabirds have disappeared or are in decline in Haida Gwaii due to brown and black rat predation. | Golumbia (2000); Nagorsen (2005) |
| snowshoe hare | <i>Lepus americanus</i> | Juneau area; Douglas Island | Y | Juneau RD | GMU 1C | Probably from Haines stock early last century | MacDonald and Cook (2007) |
| domestic rabbit | <i>Oryctolagus cuniculus</i> | Reported present on Betton Island in 1995; current status unknown. | | | | | MacDonald and Cook (2007) |
| red fox | <i>Vulpes vulpes</i> | Introduced for commercial harvest on Cleft, Dry, Kupreanof, Passage, and Sokoi islands between 1894 and 1929; none is known to have survived | | | | | MacDonald and Cook (2007) |
| American marten | <i>Martes americana</i> | Translocated to Prince of Wales, Baranof, and Chichagof islands between 1934 and 1952 from various sources in the region and elsewhere (Anchorage) | Y | Craig, Thorne Bay, Sitka, and Hoonah RDs | GMU 2, 4 | Additional documented records from Kruzof, Otstoia, Partofschikof, and Yakobi islands. Undocumented reports of marten on Tuxekan, Heceta, Suemez, and Dall islands may be from introduced stocks | MacDonald and Cook (2007) |
| domestic ferret | <i>Mustela putorius</i> | Feral animals reported near Ketchikan in 1980s but none recently | Y | Ketchikan RD | GMU 1A | Also a 1980s report of ferret on Grant Island, Clover Pass | MacDonald and Cook (2007) |
| feral house cat | <i>Felis catus</i> | A large problem in the Wrangell vicinity and probably around other Southeast towns, as well | Y | Region-wide | Region-wide | A number of pet house cat kills of endemic flying squirrel noted on Heceta Island (SOM) | |

Exotic and Invasive Species of Southeast Alaska and Adjacent British Columbia

| Common Name | Scientific Name | Distribution | On an Island? | TNF District | ADFG GMU | Comments | References |
|-------------------------|--------------------------------------|--|---------------|-------------------------|-----------|---|---|
| raccoon | <i>Procyon lotor</i> | Released on Singa Island in Sea Otter Sound in 1941; still present on El Capitan Island, and possible on nearby Prince of Wales and Kosciusko islands. Formerly present on Japonski Island near Sitka but now believed extirpated. Introduced to one location in Haida Gwaii and subsequently spread throughout the archipelago by mid-1980s | Y | Thorne Bay RD | GMU 2 | Approximately 80% of the burrow-nesting seabirds on the Queen Charlotte Islands are now believed at risk from predation by non-native raccoons. | MacDonald and Cook (2007); Hatler et al. (2008) |
| Sitka black-tailed deer | <i>Odocoileus hemionus sitkensis</i> | Successfully transplanted to islands in Yakutat Bay and on Sullivan Island, Lynn Canal. Introduced to the Haida Gwaii Archipelago in 1920s and now found on most of the larger islands. | Y | Yakutat and Juneau RDs | GMU 1D, 5 | | MacDonald and Cook (2007); Shackleton (1999) |
| wapiti | <i>Cervus canadensis</i> | Introduced on Etolin Island in 1987; now also breeding population on Zarembo Island, and perhaps Wrangell Island | Y | Wrangell RD | GMU 1B, 3 | From Oregon stocks. Population expanding, with reports from Bushy, Deer, Kupreanof, Mitkof, and Prince of Wales islands; also Cleveland Peninsula | MacDonald and Cook (2007) |
| mountain goat | <i>Oreamnos americanus</i> | Successfully transplanted on Baranof at Revillagigedo islands. | Y | Sitka and Ketchikan RDs | GMU 1A, 4 | | MacDonald and Cook (2007) |

