

WEED RISK ASSESSMENT FORM

Botanical name: Lonicera tatarica L.
 Common name: bush honeysuckle, Tatarian honeysuckle
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Outcome score:

| | | |
|---|-----------------|-----|
| A. Climatic Comparison | | |
| This species is present or may potentially establish in the following eco-geographic regions: | | |
| 1 | South Coastal | Yes |
| 2 | Interior-Boreal | Yes |
| 3 | Arctic-Alpine | No |
| This species is unlikely to establish in any region in Alaska | | |

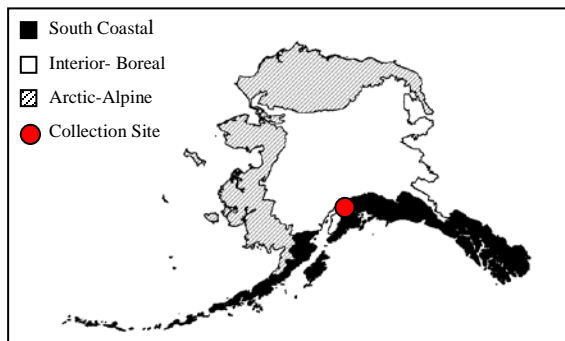
| | | |
|--------------------------------|---|-----------------------|
| B. Invasiveness Ranking | Total (Total Answered*) | Total |
| | Possible | |
| 1 | Ecological impact | 40 (40) |
| 2 | Biological characteristic and dispersal ability | 25 (23) |
| 3 | Ecological amplitude and distribution | 25 (25) |
| 4 | Feasibility of control | 10 (10) |
| | Outcome score | 100 (98) ^b |
| | Relative maximum score [†] | 0.66 |

* For questions answered "unknown" do not include point value for the question in parentheses for "Total Answered Points Possible."

[†] Calculated as ^{a/b}.

A. CLIMATIC COMPARISON:

| | |
|---|-----------------------|
| 1.1 Has this species ever been collected or documented in Alaska? | |
| Yes | Yes – continue to 1.2 |
| | No – continue to 2.1 |
| 1.2. Which eco-geographic region has it been collected or documented (see inset map)? <i>Proceed to Section B. Invasiveness Ranking.</i> | |
| Yes | South Coastal |
| | Interior-Boreal |
| | Arctic-Alpine |



Documentation: Cultivated ornamental in southern Alaska (Welsh 1974). Planted as ornamental in Anchorage (I. Lapina – pers. obs.).
Sources of information:
 Lapina, I., Botanist, Alaska Natural Heritage Program, University of Alaska Anchorage, 707 A Street, Anchorage, Alaska. Tel: (907) 257-2710 – Pers. obs.
 Welsh, S.L. 1974. Anderson’s flora of Alaska and adjacent parts of Canada. Brigham University Press. 724 pp.

2.1. Is there a 40% or higher similarity (based on CLIMEX climate matching) between climates any where the species currently occurs and

a. Juneau (South Coastal Region)?

Yes – record locations and similarity; proceed to Section B.
Invasiveness Ranking

No

b. Fairbanks (Interior-Boreal)?

Yes – record locations and similarity; proceed to Section B.
Invasiveness Ranking

No

c. Nome (Arctic-Alpine)?

Yes – record locations and similarity; proceed to Section B.
Invasiveness Ranking

No

No

– If “No” is answered for all regions, reject species from consideration

Documentation: In the Arctic-Alpine ecoregion, there is a high climatic match between Nome and areas where the species occurs such as Anchorage (66%) and Kirov (66%), Russia. However, the minimum temperatures and number of frost free days are too low for those required by *Lonicera tatarica* (120 frost free days, -38°F; USDA 2002).

Sources of information: CLIMEX for Windows, Version 1.1a. 1999. CISRO Publishing, Australia.
 Gubanov, I.A., K.V. Kiseleva, V.S. Novicov, V.N. Tichomirov. 1995. Flora of vascular plants of central European Russia. Moscow Argus. 558 pp.
 USDA (United States Department of Agriculture), NRCS (Natural Resource Conservation Service). 2002. The PLANTS Database, Version 3.5 (<http://plants.usda.gov>). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.

B. INVASIVENESS RANKING

1. ECOLOGICAL IMPACT

1.1. Impact on Natural Ecosystem Processes

- | | | |
|----|---|----|
| A. | No perceivable impact on ecosystem processes | 0 |
| B. | Influences ecosystem processes to a minor degree (e.g., has a perceivable but mild influence on soil nutrient availability) | 3 |
| C. | Significant alteration of ecosystem processes (e.g., increases sedimentation rates along streams or coastlines, reduces open water that are important to waterfowl) | 7 |
| D. | Major, possibly irreversible, alteration or disruption of ecosystem processes (e.g., the species alters geomorphology; hydrology; or affects fire frequency, altering community composition; species fixes substantial levels of nitrogen in the soil making soil unlikely to support certain native plants or more likely to favor non-native species) | 10 |
| U. | Unknown | |

Score

| |
|---|
| 5 |
|---|

Documentation:

Identify ecosystem processes impacted:

Tatarian honeysuckle can decrease light availability and deplete soil moisture and nutrients (DCR 2004). It can reduce tree regeneration in early to mid-successional forests (Batcher and Stiler 2005).

Rational:

Sources of information:

Batcher, M.S. and S.A. Stiles. 2005. Element stewardship abstract for *Lonicera*

maackii (Rupr.) Maxim (Amur honeysuckle), *Lonicera morrowii* A. Gray (Morrow's honeysuckle), *Lonicera tatarica* L. (Tatarian honeysuckle), *Lonicera x bella* Zabel (Bell's honeysuckle). The bush honeysuckles. The Nature Conservancy. Arlington, Virginia.

DCR - Department of Conservation and Recreation. 2004. Invasive Alien Plant Species of Virginia. Conserving Virginia's Natural and Recreational Resources. <http://www.dcr.state.va.us/dnh/invlist.htm> [May 11, 2004].

1.2. Impact on Natural Community Structure

- A. No perceived impact; establishes in an existing layer without influencing its structure 0
- B. Influences structure in one layer (e.g., changes the density of one layer) 3
- C. Significant impact in at least one layer (e.g., creation of a new layer or elimination of an existing layer) 7
- D. Major alteration of structure (e.g., covers canopy, eradicating most or all layers below) 10
- U. Unknown

Score 7

Documentation:

Identify type of impact or alteration:

Tatarian honeysuckle forms a dense layer that shades many native woody and herbaceous species (Charles 2001, DCR 2004).

Rational:

Sources of information:

Charles, E.W. 2001. Exotic bush honeysuckles (*Lonicera* spp.). Plant Conservation Alliance, Alien Plant Working Group. Available: <http://www.nps.gov/plants/alien/index.htm> [May 11, 2004].

DCR - Department of Conservation and Recreation. 2004. Invasive Alien Plant Species of Virginia. Conserving Virginia's Natural and Recreational Resources. <http://www.dcr.state.va.us/dnh/invlist.htm> [May 11, 2004].

1.3. Impact on Natural Community Composition

- A. No perceived impact; causes no apparent change in native populations 0
- B. Influences community composition (e.g., reduces the number of individuals in one or more native species in the community) 3
- C. Significantly alters community composition (e.g., produces a significant reduction in the population size of one or more native species in the community) 7
- D. Causes major alteration in community composition (e.g., results in the extirpation of one or several native species, reducing biodiversity or change the community composition towards species exotic to the natural community) 10
- U. Unknown

Score 5

Documentation:

Identify type of impact or alteration:

Tatarian honeysuckle reduces the richness and cover of herbaceous communities, and may entirely replace native species (Batcher and Stiles 2005). It is potentially allelopathic, preventing the growth of other species (Charles 2001, WDNR 2004).

Rational:

Sources of information:

Batcher, M.S. and S.A. Stiles. 2005. Element stewardship abstract for *Lonicera maackii* (Rupr.) Maxim (Amur honeysuckle), *Lonicera morrowii* A. Gray (Morrow's honeysuckle), *Lonicera tatarica* L. (Tatarian honeysuckle), *Lonicera x bella* Zabel (Bell's honeysuckle). The bush honeysuckles. The Nature Conservancy. Arlington, Virginia.

Charles, E.W. 2001. Exotic bush honeysuckles (*Lonicera* spp.). Plant Conservation Alliance, Alien Plant Working Group. Available: <http://www.nps.gov/plants/alien/index.htm> [May 11, 2004]

WDNR - Wisconsin Department of Natural Resources. Non-native plants. Exotic bush honeysuckles: Tartarian hoheysuckle (*Lonicera tatarica*), Morrow's honeysuckle (*Lonicera morrowii*), Bella Honeysuckle (*Lonicera x bella*).

1.4. Impact on higher trophic levels (cumulative impact of this species on the animals, fungi, microbes, and other organisms in the community it invades)

- A. Negligible perceived impact 0
- B. Minor alteration 3
- C. Moderate alteration (minor reduction in nesting/foraging sites, reduction in habitat connectivity, interference with native pollinators, injurious components such as spines, toxins) 7
- D. Severe alteration of higher trophic populations (extirpation or endangerment of an existing native species/population, or significant reduction in nesting or foraging sites) 10
- U. Unknown

Score 5

Documentation:

Identify type of impact or alteration:

Fruits of Tatarian honeysuckle are highly attractive to birds. All honeysuckles are relatively free of known significant diseases and insect or other predators (Batcher and Stiles 2001).

Rational:

Sources of information:

Batcher, M.S. and S.A. Stiles. 2005. Element stewardship abstract for *Lonicera maackii* (Rupr.) Maxim (Amur honeysuckle), *Lonicera morrowii* A. Gray (Morrow's honeysuckle), *Lonicera tatarica* L. (Tatarian honeysuckle), *Lonicera x bella* Zabel (Bell's honeysuckle). The bush honeysuckles. The Nature Conservancy. Arlington, Virginia.

Total Possible 40

Total 22

2. BIOLOGICAL CHARACTERISTICS AND DISPERSAL ABILITY

2.1. Mode of reproduction

- A. Not aggressive reproduction (few [0-10] seeds per plant and no vegetative reproduction) 0
- B. Somewhat aggressive (reproduces only by seeds (11-1,000/m²)) 1
- C. Moderately aggressive (reproduces vegetatively and/or by a moderate amount of seed, <1,000/m²) 2
- D. Highly aggressive reproduction (extensive vegetative spread and/or many seeded, >1,000/m²) 3
- U. Unknown

Score 2

Documentation:

Describe key reproductive characteristics (including seeds per plant):

Tatarian honeysuckle has moderate seed production and is capable of vegetative spread (Batcher and Stiles 2001, Butterfield et al. 1996, ODNR 2003).

Rational:

Sources of information:

Batcher, M.S. and S.A. Stiles. 2005. Element stewardship abstract for *Lonicera maackii* (Rupr.) Maxim (Amur honeysuckle), *Lonicera morrowii* A. Gray (Morrow's honeysuckle), *Lonicera tatarica* L. (Tatarian honeysuckle), *Lonicera x bella* Zabel (Bell's honeysuckle). The bush honeysuckles. The Nature Conservancy. Arlington, Virginia.

Butterfield, C., J. Stubbendieck, and J. Stumpf. 1996. Species abstracts of highly disruptive exotic plants. Jamestown, ND: Northern Prairie Wildlife Research Center Home Page.

<http://www.npwrc.usgs.gov/resource/othrdata/exoticab/exoticab.htm>
(Version 16JUL97).

ODNR – Ohio Department of Natural Resources. 2003. Invasive plants of Ohio –

Amur, morrow and tatarian honeysuckle. *Lonicera maackii*, *L. morrowii*, *L. tatarica*. Available:
<http://www.dnr.state.oh.us/dnap/invasive/1amurhoneysuck.htm> [May 11, 2004].

2.2. Innate potential for long-distance dispersal (bird dispersal, sticks to animal hair, buoyant fruits, wind-dispersal)

- A. Does not occur (no long-distance dispersal mechanisms) 0
- B. Infrequent or inefficient long-distance dispersal (occurs occasionally despite lack of adaptations) 2
- C. Numerous opportunities for long-distance dispersal (species has adaptations such as pappus, hooked fruit-coats, etc.) 3
- U. Unknown

Score 3

Documentation:

Identify dispersal mechanisms:

Seed of Tatarian honeysuckle dispers by birds and perhaps, small mammals is common (Batcher and Stiles 2001, Charles 2001, Hoppes 1988).

Rational:

Sources of information:

Batcher, M.S. and S.A. Stiles. 2005. Element stewardship abstract for *Lonicera maackii* (Rupr.) Maxim (Amur honeysuckle), *Lonicera morrowii* A. Gray (Morrow's honeysuckle), *Lonicera tatarica* L. (Tatarian honeysuckle), *Lonicera x bella* Zabel (Bell's honeysuckle). The bush honeysuckles. The Nature Conservancy. Arlington, Virginia.

Charles, E.W. 2001. Exotic bush honeysuckles (*Lonicera* spp.). Plant Conservation Alliance, Alien Plant Working Group. Available:

<http://www.nps.gov/plants/alien/index.htm> [May 11, 2004].

Hoppes, W.G. 1988. Seedfall pattern of several species of bird-dispersed plants in Illinois woodland. *Ecology*. 69(2): 320-329.

2.3. Potential to be spread by human activities (both directly and indirectly – possible mechanisms include: commercial sales, use as forage/revegetation, spread along highways, transport on boats, contamination, etc.)

- A. Does not occur 0
- B. Low (human dispersal is infrequent or inefficient) 1
- C. Moderate (human dispersal occurs) 2
- D. High (there are numerous opportunities for dispersal to new areas) 3
- U. Unknown

Score 3

Documentation:

Identify dispersal mechanisms:

Tatarian honeysuckle has been widely used in horticultural plantings (Batcher and Shelly 1985, WDNR 2003).

Rational:

Sources of information:

Batcher, M.S. and S.A. Stiles. 2005. Element stewardship abstract for *Lonicera maackii* (Rupr.) Maxim (Amur honeysuckle), *Lonicera morrowii* A. Gray (Morrow's honeysuckle), *Lonicera tatarica* L. (Tatarian honeysuckle), *Lonicera x bella* Zabel (Bell's honeysuckle). The bush honeysuckles. The Nature Conservancy. Arlington, Virginia.

WDNR - Wisconsin Department of Natural Resources. 2004. Non-native plants. Exotic bush honeysuckles: Tartarian hoheysuckle (*Lonicera tatarica*), Morrow's honeysuckle (*Lonicera morrowii*), Bella Honeysuckle (*Lonicera x bella*). 2003. <http://www.dnr.state.wi.us> [May 11, 2004].

2.4. Allelopathic

- A. No 0

- B. Yes
- U. Unknown

2

Score U

Documentation:

Describe effect on adjacent plants:

Tatarian honeysuckle has been recorded as non-allelopathic (USDA 2002), but possible allelopathy potential has been reported (WDNR 2004, Charles 2001).

Rational:

Sources of information:

USDA (United States Department of Agriculture), NRCS (Natural Resource Conservation Service). 2002. The PLANTS Database, Version 3.5 (<http://plants.usda.gov>). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.

Charles, E.W. 2001. Exotic bush honeysuckles (*Lonicera* spp.). Plant Conservation Alliance, Alien Plant Working Group. Available:

<http://www.nps.gov/plants/alien/index.htm> [May 11, 2004].

WDNR - Wisconsin Department of Natural Resources. 2004. Non-native plants. Exotic bush honeysuckles: Tartarian hoheysuckle (*Lonicera tatarica*), Morrow's honeysuckle (*Lonicera morrowii*), Bella Honeysuckle (*Lonicera x bella*). 2003. <http://www.dnr.state.wi.us> [May 11, 2004].

2.5. Competitive ability

- A. Poor competitor for limiting factors 0
- B. Moderately competitive for limiting factors 1
- C. Highly competitive for limiting factors and/or nitrogen fixing ability 3
- U. Unknown

Score 3

Documentation:

Evidence of competitive ability:

Tatarian honeysuckle is able to outcompete native wildflowers for light and other resources (ODNR 2003, WDNR 2003).

Rational:

Honeysuckles begin photosynthesizing earlier in the spring than most other plants, giving them an advantage over other species (Batcher and Stiles 2001).

Sources of information:

ODNR – Ohio Department of Natural Resources. 2003. Invasive plants of Ohio – Amur, morrow and tatarian honeysuckle. *Lonicera maackii*, *L. morrowii*, *L. tatarica*. Available:

<http://www.dnr.state.oh.us/dnap/invasive/1amurhoneysuck.htm> [May 11, 2004].

Batcher, M.S. and S.A. Stiles. 2005. Element stewardship abstract for *Lonicera maackii* (Rupr.) Maxim (Amur honeysuckle), *Lonicera morrowii* A. Gray (Morrow's honeysuckle), *Lonicera tatarica* L. (Tatarian honeysuckle), *Lonicera x bella* Zabel (Bell's honeysuckle). The bush honeysuckles. The Nature Conservancy. Arlington, Virginia.

WDNR - Wisconsin Department of Natural Resources. 2003. Non-native plants. Exotic bush honeysuckles: Tartarian hoheysuckle (*Lonicera tatarica*), Morrow's honeysuckle (*Lonicera morrowii*), Bella Honeysuckle (*Lonicera x bella*). 2003. <http://www.dnr.state.wi.us> [May 11, 2004].

2.6. Forms dense thickets, climbing or smothering growth habit, or otherwise taller than the surrounding vegetation

- A. No 0
- B. Forms dense thickets 1
- C. Has climbing or smothering growth habit, or otherwise taller than the surrounding vegetation 2
- U. Unknown

Score 2

Documentation:

Describe grow form:

Tatarian honeysuckle is a shrub that grows up to 10 feet tall and forms a dense layer (Welsh 1974, DCR 2004).

Rational:

Sources of information:

DCR - Department of Conservation and Recreation. 2004. Invasive Alien Plant Species of Virginia. Conserving Virginia's Natural and Recreational Resources. <http://www.dcr.state.va.us/dnh/invlist.htm> [May 11, 2004].

Welsh, S.L. 1974. Anderson's flora of Alaska and adjacent parts of Canada. Brigham University Press. 724 pp.

2.7. Germination requirements

- A. Requires open soil and disturbance to germinate 0
- B. Can germinate in vegetated areas but in a narrow range or in special conditions 2
- C. Can germinate in existing vegetation in a wide range of conditions 3
- U. Unknown

Score

Documentation:

Describe germination requirements:

Seedlings of Tatarian honeysuckle establish most readily on barren ground or in areas with sparse understory. It also establishes in late-successional sites (Butterfield et al. 1996). Light promotes germination but is not necessary (Batcher and Stiles 2001).

Rational:

Sources of information:

Batcher, M.S. and S.A. Stiles. 2005. Element stewardship abstract for *Lonicera maackii* (Rupr.) Maxim (Amur honeysuckle), *Lonicera morrowii* A. Gray (Morrow's honeysuckle), *Lonicera tatarica* L. (Tatarian honeysuckle), *Lonicera x bella* Zabel (Bell's honeysuckle). The bush honeysuckles. The Nature Conservancy. Arlington, Virginia.

Butterfield, C., J. Stubbendieck, and J. Stumpf. 1996. Species abstracts of highly disruptive exotic plants. Jamestown, ND: Northern Prairie Wildlife Research Center Home Page.

<http://www.npwrc.usgs.gov/resource/othrdata/exoticab/exoticab.htm> (Version 16JUL97).

2.8. Other species in the genus invasive in Alaska or elsewhere

- A. No 0
- B. Yes 3
- U. Unknown

Score

Documentation:

Species:

Lonicera maackii (Rupr.) Maxim, *L. morrowii* A. Gray, *L. x bella* Zabel (Batcher and Shelly 2001).

Sources of information:

Batcher, M.S. and S.A. Stiles. 2005. Element stewardship abstract for *Lonicera maackii* (Rupr.) Maxim (Amur honeysuckle), *Lonicera morrowii* A. Gray (Morrow's honeysuckle), *Lonicera tatarica* L. (Tatarian honeysuckle), *Lonicera x bella* Zabel (Bell's honeysuckle). The bush honeysuckles. The Nature Conservancy. Arlington, Virginia.

2.9. Aquatic, wetland, or riparian species

- A. Not invasive in wetland communities 0
- B. Invasive in riparian communities 1
- C. Invasive in wetland communities 3
- U. Unknown

Score

Documentation:

Describe type of habitat:

Tatarian honeysuckle occurs most often along roadsides and forest edges, pastures and abandoned fields (DCR 2004). It is recorded as occurring in marshes in Ohio (ODNR 2004)

Rational:

Sources of information:

DCR - Department of Conservation and Recreation. 2004. Invasive Alien Plant Species of Virginia. Conserving Virginia’s Natural and Recreational Resources. <http://www.dcr.state.va.us/dnh/invlist.htm> [May 11, 2004].

ODNR – Ohio Department of Natural Resources. 2003. Invasive plants of Ohio – Amur, morrow and tatarian honeysuckle. *Lonicera maackii*, *L. morrowii*, *L. tatarica*. Available: <http://www.dnr.state.oh.us/dnap/invasive/1amurhoneysuck.htm> [May 11, 2004].

| | |
|----------------|----|
| Total Possible | 23 |
| Total | 19 |

3. DISTRIBUTION

3.1. Is the species highly domesticated or a weed of agriculture

- A. No 0
- B. Is occasionally an agricultural pest 2
- C. Has been grown deliberately, bred, or is known as a significant agricultural pest 4
- U. Unknown

| | |
|-------|---|
| Score | 4 |
|-------|---|

Documentation:

Identify reason for selection, or evidence of weedy history:

Tatarian honeysuckle has been cultivated as ornamentals in the United States since the 1800s. Some varieties were developed and planted for wildlife food source and revegetation (DCR 2004). Many state and private nurseries sell bush honeysuckles (Batcher and Stiles 2001).

Rational:

Sources of information:

Batcher, M.S. and S.A. Stiles. 2005. Element stewardship abstract for *Lonicera maackii* (Rupr.) Maxim (Amur honeysuckle), *Lonicera morrowii* A. Gray (Morrow’s honeysuckle), *Lonicera tatarica* L. (Tatarian honeysuckle), *Lonicera x bella* Zabel (Bell’s honeysuckle). The bush honeysuckles. The Nature Conservancy. Arlington, Virginia.

DCR - Department of Conservation and Recreation. 2004. Invasive Alien Plant Species of Virginia. Conserving Virginia’s Natural and Recreational Resources. <http://www.dcr.state.va.us/dnh/invlist.htm> [May 11, 2004].

3.2. Known level of impact in natural areas

- A. Not known to cause impact in any other natural area 0
- B. Known to cause impacts in natural areas, but in dissimilar habitats and climate zones than exist in regions of Alaska 1
- C. Known to cause low impact in natural areas in similar habitats and climate zones to those present in Alaska 3
- D. Known to cause moderate impact in natural areas in similar habitat and climate zones 4
- E. Known to cause high impact in natural areas in similar habitat and climate zones 6
- U. Unknown

| | |
|-------|---|
| Score | 3 |
|-------|---|

Documentation:

Identify type of habitat and states or provinces where it occurs:

Tatarian honeysuckle occurs along forest edges in Iowa, where it has the potential to modify existing native plant communities (Butterfield et al. 1996). It is found in the

understory of woodlands and marshes in Ohio (ODNR 2004).
Sources of information:
 Butterfield, C., J. Stubbendieck, and J. Stumpf. 1996. Species abstracts of highly disruptive exotic plants. Jamestown, ND: Northern Prairie Wildlife Research Center Home Page.
<http://www.npwrc.usgs.gov/resource/othrdata/exoticab/exoticab.htm> (Version 16JUL97).
 ODNR – Ohio Department of Natural Resources. 2003. Invasive plants of Ohio – Amur, morrow and tatarian honeysuckle. *Lonicera maackii*, *L. morrowii*, *L. tatarica*. Available:
<http://www.dnr.state.oh.us/dnap/invasive/1amurhoneysuck.htm> [May 11, 2004].

3.3. Role of anthropogenic and natural disturbance in establishment

- A. Requires anthropogenic disturbances to establish 0
- B. May occasionally establish in undisturbed areas but can readily establish in areas with natural disturbances 3
- C. Can establish independent of any known natural or anthropogenic disturbances 5
- U. Unknown

Score

| |
|---|
| 3 |
|---|

Documentation:
 Identify type of disturbance:
 Tatarian honeysuckle can invade disturbed sites as well as intact forests (Batcher and Stiles 2001). Areas with disturbances are most vulnerable by invasion (WDNR 2003).
 Rational:
Sources of information:
 Batcher, M.S. and S.A. Stiles. 2005. Element stewardship abstract for *Lonicera maackii* (Rupr.) Maxim (Amur honeysuckle), *Lonicera morrowii* A. Gray (Morrow’s honeysuckle), *Lonicera tatarica* L. (Tatarian honeysuckle), *Lonicera x bella* Zabel (Bell’s honeysuckle). The bush honeysuckles. The Nature Conservancy. Arlington, Virginia.
 WDNR - Wisconsin Department of Natural Resources. 2003. Non-native plants. Exotic bush honeysuckles: Tartarian hoheysuckle (*Lonicera tatarica*), Morrow’s honeysuckle (*Lonicera morrowii*), Bella Honeysuckle (*Lonicera x bella*). 2003. <http://www.dnr.state.wi.us> [May 11, 2004].

3.4. Current global distribution

- A. Occurs in one or two continents or regions (e.g., Mediterranean region) 0
- B. Extends over three or more continents 3
- C. Extends over three or more continents, including successful introductions in arctic or subarctic regions 5
- U. Unknown

Score

| |
|---|
| 3 |
|---|

Documentation:
 Describe distribution:
 Tatarian honeysuckle is a native of Europe and eastern Asia, occurring in North America more recently (DCR 2004).
 Rational:
Sources of information:
 DCR - Department of Conservation and Recreation. 2004. Invasive Alien Plant Species of Virginia. Conserving Virginia’s Natural and Recreational Resources. <http://www.dcr.state.va.us/dnh/invlist.htm> [May 11, 2004].

3.5. Extent of the species U.S. range and/or occurrence of formal state or provincial listing

- A. 0-5% of the states 0
- B. 6-20% of the states 2
- C. 21-50%, and/or state listed as a problem weed (e.g., “Noxious,” or “Invasive”) in 1 state or Canadian province 4

- D. Greater than 50%, and/or identified as “Noxious” in 2 or more states or Canadian provinces 5
- U. Unknown

Score

| |
|---|
| 5 |
|---|

Documentation:

Identify states invaded:

Tatarian honeysuckle is common in most northeastern and mid-Atlantic states and in some Midwestern and western states, and in south-central Canada (Batcher and Stiles 2001). This species is listed as a noxious in Vermont and is declared as an invasive weed in Wisconsin (USDA 2002).

Rational:

Sources of information:

Batcher, M.S. and S.A. Stiles. 2005. Element stewardship abstract for *Lonicera maackii* (Rupr.) Maxim (Amur honeysuckle), *Lonicera morrowii* A. Gray (Morrow’s honeysuckle), *Lonicera tatarica* L. (Tatarian honeysuckle), *Lonicera x bella* Zabel (Bell’s honeysuckle). The bush honeysuckles. The Nature Conservancy. Arlington, Virginia.

USDA (United States Department of Agriculture), NRCS (Natural Resource Conservation Service). 2002. The PLANTS Database, Version 3.5 (<http://plants.usda.gov>). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.

Total Possible

| |
|----|
| 25 |
|----|

Total

| |
|----|
| 18 |
|----|

4. FEASIBILITY OF CONTROL

4.1. Seed banks

- A. Seeds remain viable in the soil for less than 3 years 0
- B. Seeds remain viable in the soil for between 3 and 5 years 2
- C. Seeds remain viable in the soil for 5 years and more 3
- U. Unknown

Score

| |
|---|
| 1 |
|---|

Documentation:

Identify longevity of seed bank:

Seeds of Tatarian honeysuckle can remain viable for two or more years (Butterfield et al. 1996).

Rational:

Sources of information:

Butterfield, C., J. Stubbendieck, and J. Stumpf. 1996. Species abstracts of highly disruptive exotic plants. Jamestown, ND: Northern Prairie Wildlife Research Center Home Page.
<http://www.npwr.usgs.gov/resource/othrdata/exoticab/exoticab.htm> (Version 16JUL97).

4.2. Vegetative regeneration

- A. No resprouting following removal of aboveground growth 0
- B. Resprouting from ground-level meristems 1
- C. Resprouting from extensive underground system 2
- D. Any plant part is a viable propagule 3
- U. Unknown

Score

| |
|---|
| 2 |
|---|

Documentation:

Describe vegetative response:

Cutting of Tatarian honeysuckle facilitates vigorous resprouting (Batcher and Stiles 2001, WDNR 2004).

Rational:

Sources of information:

Batcher, M.S. and S.A. Stiles. 2005. Element stewardship abstract for *Lonicera maackii* (Rupr.) Maxim (Amur honeysuckle), *Lonicera morrowii* A. Gray (Morrow's honeysuckle), *Lonicera tatarica* L. (Tatarian honeysuckle), *Lonicera x bella* Zabel (Bell's honeysuckle). The bush honeysuckles. The Nature Conservancy. Arlington, Virginia.

WDNR - Wisconsin Department of Natural Resources. Non-native plants. Exotic bush honeysuckles: Tartarian hoheysuckle (*Lonicera tatarica*), Morrow's honeysuckle (*Lonicera morrowii*), Bella Honeysuckle (*Lonicera x bella*). 2003. <http://www.dnr.state.wi.us> [May 11, 2004].

4.3. Level of effort required

- A. Management is not required (e.g., species does not persist without repeated anthropogenic disturbance) 0
- B. Management is relatively easy and inexpensive; requires a minor investment in human and financial resources 2
- C. Management requires a major short-term investment of human and financial resources, or a moderate long-term investment 3
- D. Management requires a major, long-term investment of human and financial resources 4
- U. Unknown

Score

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|---|
| 3 |
|---|

Documentation:

Identify types of control methods and time-term required:

Mechanical and chemical control methods can be used for control of Tatarian honeysuckle. Treatment must be repeated for at least three to five years in order to stop new plants emerging from the seed bank (Batcher and Stiles 2001, Butterfield et al. 1996, WDNR 2004).

Rational:

Sources of information:

Batcher, M.S. and S.A. Stiles. 2005. Element stewardship abstract for *Lonicera maackii* (Rupr.) Maxim (Amur honeysuckle), *Lonicera morrowii* A. Gray (Morrow's honeysuckle), *Lonicera tatarica* L. (Tatarian honeysuckle), *Lonicera x bella* Zabel (Bell's honeysuckle). The bush honeysuckles. The Nature Conservancy. Arlington, Virginia.

Butterfield, C., J. Stubbendieck and J. Stumpf. 1996. Species abstracts of highly disruptive exotic plants. Jamestown, ND: Northern Prairie Wildlife Research Center Home Page.

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WDNR - Wisconsin Department of Natural Resources. Non-native plants. Exotic bush honeysuckles: Tartarian hoheysuckle (*Lonicera tatarica*), Morrow's honeysuckle (*Lonicera morrowii*), Bella Honeysuckle (*Lonicera x bella*). 2003. <http://www.dnr.state.wi.us> [May 11, 2004].

Total Possible

| |
|----|
| 10 |
|----|

Total

| |
|---|
| 6 |
|---|

Total for 4 sections Possible

| |
|----|
| 98 |
|----|

Total for 4 sections

| |
|----|
| 65 |
|----|

References:

- Batcher, M.S. and S.A. Stiles. 2005. Element stewardship abstract for *Lonicera maackii* (Rupr.) Maxim (Amur honeysuckle), *Lonicera morrowii* A. Gray (Morrow's honeysuckle), *Lonicera tatarica* L. (Tatarian honeysuckle), *Lonicera x bella* Zabel (Bell's honeysuckle). The bush honeysuckles. The Nature Conservancy. Arlington, Virginia.
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