



***Plant Risk Evaluator -- PRETM
Evaluation Report***

Ulmus pumila -- Arizona

2022 Western IPM Grant Project

PRE Score: 16 -- High Potential Risk

Confidence: 77 / 100

Questions answered: 20 of 20 -- Valid (80% or more questions answered)

Privacy: Public

Status: Completed

Evaluation Date: February 20, 2023

This PDF was created on May 22, 2025

This project was funded in part by the USDA National Institute of Food and Agriculture through the Western Integrated Pest Management Center, grant number 2018-70006-28881.



Plant Evaluated

Ulmus pumila



Image by Wikipedia



Evaluation Overview

A PRE™ screener conducted a literature review for this plant (*Ulmus pumila*) in an effort to understand the invasive history, reproductive strategies, and the impact, if any, on the region's native plants and animals. This research reflects the data available at the time this evaluation was conducted.

Summary

Siberian elm (*Ulmus pumila*) is native to northern China, Korea, Mongolia, and Eastern Siberia. The tree is today regarded as naturalized or invasive in most regions where it has been introduced. Its invasion success can partly be explained by inter- and intraspecific hybridization. Introgression with native *Ulmus* is an issue in some regions, but not in Arizona which contains no native *Ulmus* species. *Ulmus pumila* has been noted as spreading in middle-elevations of Arizona, particularly in Yavapai County, Arizona. The plant reproduces by seed, which can be transported long-distances on wind and potentially adhering to vehicles and perhaps animals. The plants can emerge from root sprouts which complicates management with mechanical techniques.

General Information

Status: Completed

Screener: Michael Chamberland

Evaluation Date: February 20, 2023

Plant Information

Plant: *Ulmus pumila*

Regional Information

Region Name: Arizona



Climate Matching Map

To answer four of the PRE questions for a regional evaluation, a climate map with three climate data layers (Precipitation, UN EcoZones, and Plant Hardiness) is needed. These maps were built using a toolkit created in collaboration with GreenInfo Network, USDA, PlantRight, California Invasive Plant Council, and The Information Center for the Environment at UC Davis.

Click [here](#) to see the generated climate matching map for this region. This climate match database is hosted by GreenInfo Network and publicly accessible.



Evaluation Questions

These questions are based on an article published by PLOS One, which can be found here:

<https://doi.org/10.1371/journal.pone.0121053>.

Invasive History and Climate Matching (Questions 1 - 6)

1. Has the species (or cultivar or variety, if applicable; applies to subsequent "species" questions) become naturalized where it is not native?

- Answer: **Yes**, which contributes **1** point(s) to the total PRE score.
- The *screeners* has a **Very High** confidence in this answer based on the available literature.

Answer / Justification:

Siberian elm is native to northern Asia and was introduced in North America in the 1860s. It has been planted throughout the Midwest and Great Plains for windbreaks and lumber. Siberian elm invades pastures, roadsides, and prairies throughout the Midwest and Great Plains regions of the United States. The trees are drought and cold resistant, allowing them to grow in areas where other trees cannot (Extension.org, 2019). Siberian elm has naturalized in nearly all counties in Indiana (Jacquart et al. 2007). It has also invaded Argentina (Hirsch & Hensen, 2010). *Ulmus pumila* is considered an invasive tree in 41 of the United States (Zalapa et al. 2010).

Reference(s):

- Extension,.org. (2019). *Ulmus pumila*, Siberian Elm – Invasive Species.
- Jacquart, E., O'Connor P., Collins K., Gorden D., Kiefer J., & Howe K. (2007). Assessment of Invasive Species in Indiana's Natural Areas: Siberian Elm (*Ulmus pumila*). 9 pp..
- Hirsch, H., & Hensen I. (2010). Investigations on the invasion success of *Ulmus pumila* L. in North America and Argentina.
- Zalapa, J. E., Brunet J., & Guries R. P. (2010). The extent of hybridization and its impact on the genetic diversity and population structure of an invasive tree, *Ulmus pumila* (Ulmaceae). *Evolutionary Applications*. 3, 157–168.



2. Is the species (or cultivar or variety) noted as being naturalized in the US or world in a similar climate?

- Answer: **Yes**, which contributes **2** point(s) to the total PRE score.
- The *screeners* has a **Very High** confidence in this answer based on the available literature.

Answer / Justification:

Ulmus pumila is widely reported as invasive in North America, including western states (Perry et al. 2018, Reynolds et al. 2022) and Texas (TexasInvasives, 2023). The species is listed as a Class C noxious weed in New Mexico (Ashigh, et al. 2009). It is noted as naturalized in Yavapai Co, Arizona (Halldorson, 2022). It has also invaded Argentina (Hirsch & Hensen, 2010), which is mostly a climate match for Arizona.

Reference(s):

- Perry, L., Reynolds L., & Shafroth P. (2018). Divergent effects of land-use, propagule pressure, and climate on woody riparian invasion. *Biological Invasions*. 20, 3271–3295.
 - TexasInvasives (2023). Texas Invasives.
 - Ashigh, J., Wanstall J., & Sholedice F. (2009). NMSU: Troublesome Weeds of New Mexico.
 - Halldorson, M. (2022). Yavapai County Native & Naturalized Plants. Yavapai County Native & Naturalized Plants.
 - Hirsch, H., & Hensen I. (2010). Investigations on the invasion success of *Ulmus pumila* L. in North America and Argentina.
-

3. Is the species (or cultivar or variety) noted as being invasive in the U.S. or world?

- Answer: **Yes**, which contributes **2** point(s) to the total PRE score.
- The *screeners* has a **Very High** confidence in this answer based on the available literature.

Answer / Justification:

Ulmus pumila is today regarded as naturalized or invasive in most regions where it has been introduced. Its invasion success can partly be explained by inter- and intraspecific hybridization, leading to high genetic diversity in the corresponding non-native populations (Hirsch et al. 2016). Hirsch makes the distinction between naturalized and invasive, and indicates *U. pumila* can be naturalized and can also reach the magnitude of invasive. Siberian elm is listed as a Class C Noxious Weed in New Mexico (Beck & Wanstall, 2022).



Reference(s):

- Hirsch, H., Hensen I., Wesche K., Renison D., Wypior C., Hartmann M., et al. (2016). Non-native populations of an invasive tree outperform their native conspecifics. *AoB PLANTS*. 8, plw071.
 - Beck, L., & Wanstall J. (2022). Noxious and Troublesome Weeds of New Mexico.
-

4. Is the species (or cultivar or variety) noted as being invasive in the US or world in a similar climate?

- Answer: **Yes**, which contributes **3** point(s) to the total PRE score.
- The *screeener* has a **Very High** confidence in this answer based on the available literature.

Answer / Justification:

The Siberian elm is a native of relatively moist regions of East Asia, but occurs westwards up to the dry Gobi desert, where it is bound to water surplus sites and oases. In North America, the Siberian elm was widely planted on the plains as a fast growing windbreak or shady tree, and naturalized populations can be found along river banks as well as on dry sites. Furthermore, this species spreads in the Argentinean Pampa where it colonizes old field and grasslands (Hirsch & Hensen, 2010). Siberian elm appears more characteristic of colder and less xeric regions than Arizona, but Arizona contains upland plains with cold winters as well. Siberian elm is listed as a Class C Noxious Weed in New Mexico. Class C species are widespread in the state (Beck & Wanstall, 2022).

Reference(s):

- Hirsch, H., & Hensen I. (2010). Investigations on the invasion success of *Ulmus pumila* L. in North America and Argentina.
 - Beck, L., & Wanstall J. (2022). Noxious and Troublesome Weeds of New Mexico.
-

5. Are other species of the same genus (or closely related genera) invasive in a similar climate?

- Answer: **No**, which contributes **0** point(s) to the total PRE score.
- The *screeener* has a **Low** confidence in this answer based on the available literature.



Answer / Justification:

The Chinese elm, *Ulmus parvifolia* can naturalize (reseed) in heavily and not so heavily irrigated landscapes in Phoenix and southern California (Martin, 2023). However this plant would not appear to meet the definition of invasive used by the PRE.

Reference(s):

- Martin, C. (2023). Virtual Library of Phoenix Landscape Plants.
-

6. Is the species (or cultivar or variety) found predominately in a climate matching the region of concern?

- Answer: **No**, which contributes **0** point(s) to the total PRE score.
- The *screeners* has a **High** confidence in this answer based on the available literature.

Answer / Justification:

Ulmus pumila is found widely across northern Eurasia. It is naturalized across most of the USA and into Canada. It has some limited naturalization in Mexico and South America. It is not shown as present in climate-matching areas of Africa, Australia or the Middle-East (GBIF, 2017). The Siberian elm is a native of relatively moist regions of East Asia, but occurs westwards up to the dry Gobi desert, where it is bound to water surplus sites and oases (Hirsch & Hensen, 2010). The Siberian elm appears to have considerable adaptability to a variety of climates, but it is not found predominately in a climate matching Arizona.

Reference(s):

- Hirsch, H., & Hensen I. (2010). Investigations on the invasion success of *Ulmus pumila* L. in North America and Argentina.
 - GBIF (2017). *Ulmus pumila* L..
-



Impact on Native Plants and Animals (Questions 7 - 10)

7. Does this plant displace native plants and dominate (overtop or smother) the plant community in areas where it has established?

- Answer: **Yes**, which contributes **1** point(s) to the total PRE score.
- The *screeners* has a **Very High** confidence in this answer based on the available literature.

Answer / Justification:

Siberian elm is an invasive tree that forms dense thickets, shading and crowding out native plants, thereby reducing forage for wild animals and livestock (Extension.org, 2019). It quickly out-competes desirable native plants, especially in sparsely vegetated or disturbed areas (USDA, 2014).

Reference(s):

- Extension,.org. (2019). *Ulmus pumila*, Siberian Elm – Invasive Species.
 - USDA (2014). Field Guide for Managing Siberian Elm in the Southwest.
-

8. Is the plant noted as promoting fire and/or changing fire regimes?

- Answer: **No**, which contributes **0** point(s) to the total PRE score.
- The *screeners* has a **Medium** confidence in this answer based on the available literature.

Answer / Justification:

A prescribed burn may be used in certain fire-adapted areas to remove and suppress top growth. Depending on fire intensity, burning will control seedlings, but saplings and older trees will usually survive and regrow from the root system (USDA, 2014). This account suggests the plant is not flammable and does not promote a fire regime. It also suggests that seedlings have vulnerability to fire. No sources were found that refer to the plant changing fire frequency or intensity.

Reference(s):

- USDA (2014). Field Guide for Managing Siberian Elm in the Southwest.
-



9. Is the plant a health risk to humans or animals/fish? Has the species been noted as impacting grazing systems?

- Answer: **Yes**, which contributes **1** point(s) to the total PRE score.
- The *screeners* has a **Medium** confidence in this answer based on the available literature.

Answer / Justification:

Siberian elm forms dense thickets that close open areas and displace native plants, thereby reducing forage for wild animals and livestock (Extension.org, 2019). By inference, this could impact grazing systems.

Reference(s):

- Extension,.org. (2019). *Ulmus pumila*, Siberian Elm – Invasive Species.
-

10. Does the plant produce impenetrable thickets, blocking or slowing movement of animals, livestock, or humans?

- Answer: **Yes**, which contributes **1** point(s) to the total PRE score.
- The *screeners* has a **Medium** confidence in this answer based on the available literature.

Answer / Justification:

Siberian elm forms dense thickets that close open areas and displace native plants, thereby reducing forage for wild animals and livestock (Extension.org, 2019). By inference , it could slow or block the movement of larger animals.

Reference(s):

- Extension,.org. (2019). *Ulmus pumila*, Siberian Elm – Invasive Species.
-



Reproductive Strategies (Questions 11 - 17)

11. Does this species (or cultivar or variety) reproduce and spread vegetatively?

- Answer: **No**, which contributes **0** point(s) to the total PRE score.
- The *screener* has a **High** confidence in this answer based on the available literature.

Answer / Justification:

Reproduces primarily by seed; roots resprout when top growth is damaged. Trunks may be cut close to the ground to remove top growth. Anticipate that trunk and root resprouts will return later in the growing season (USDA, 2014). *Ulmus pumila* will resprout from the roots following damage to or cutting of the main stem, but this is not a significant mechanism of spread (Wesche et al. 2011).

Reference(s):

- USDA (2014). Field Guide for Managing Siberian Elm in the Southwest.
 - Wesche, K., Walther D., von Wehrden H., & Hensen I. (2011). Trees in the desert: Reproduction and genetic structure of fragmented *Ulmus pumila* forests in Mongolian drylands. *Flora*. 206, 91–99.
-

12. If naturally detached fragments from this plant are capable of producing new plants, is this a common method of reproduction for the plant?

- Answer: **No**, which contributes **0** point(s) to the total PRE score.
- The *screener* has a **High** confidence in this answer based on the available literature.

Answer / Justification:

Reproduces primarily by seed; roots resprout when top growth is damaged (USDA, 2014). Reproduction by fragmentation is not mentioned in the literature on Siberian elm reproduction.

Reference(s):

- USDA (2014). Field Guide for Managing Siberian Elm in the Southwest.
-



13. Does the species (or cultivar or variety) commonly produce viable seed?

- Answer: **Yes**, which contributes **1** point(s) to the total PRE score.
- The *screeners* has a **Very High** confidence in this answer based on the available literature.

Answer / Justification:

Germination rate is high and seedlings soon establish in the bare ground found early in the growing season (TexasInvasives, 2023). Seeds of non-native populations of the woody Siberian elm, *Ulmus pumila*, germinated faster than those of native populations (Hirsch et al. 2016).

Reference(s):

- TexasInvasives (2023). Texas Invasives.
 - Hirsch, H., Hensen I., Wesche K., Renison D., Wypior C., Hartmann M., et al. (2016). Non-native populations of an invasive tree outperform their native conspecifics. *AoB PLANTS*. 8, plw071.
-

14. Does this plant produce copious viable seeds each year (> 1000)?

- Answer: **Yes**, which contributes **1** point(s) to the total PRE score.
- The *screeners* has a **Medium** confidence in this answer based on the available literature.

Answer / Justification:

Jacquart et al. (2007) state that “[e]ven small trees can have >1,000 seeds.” This seems reasonable for mature trees, but the references provided by the authors either don’t support this assertion quantitatively or could not be found. Thus confidence for this answer can only be Medium.

Reference(s):

- Jacquart, E., O’Connor P., Collins K., Gorden D., Kiefer J., & Howe K. (2007). Assessment of Invasive Species in Indiana’s Natural Areas: Siberian Elm (*Ulmus pumila*). 9 pp..
-



15. Is there significant germination (>25%) of seeds the next growing season, with no requirement of an infrequent environmental condition for seeds to germinate (i.e. fire) or long dormancy period?

- Answer: **Yes**, which contributes **1** point(s) to the total PRE score.
- The *screeners* has a **High** confidence in this answer based on the available literature.

Answer / Justification:

Wesche et al. (2011) reported germination rates of 48-74% (depending on substrate type) for *U. pumila* in field tests within the species native range in Mongolia. Given the high germination rates reported from laboratory studies (74-89 %; Hirsch et al. 2012, Song et al. 2011) it seems reasonable to infer that > 25% of seeds would germinate in the wild given appropriate substrate, temperature, and moisture habitats within the species' naturalized range.

Reference(s):

- Wesche, K., Walther D., von Wehrden H., & Hensen I. (2011). Trees in the desert: Reproduction and genetic structure of fragmented *Ulmus pumila* forests in Mongolian drylands. *Flora*. 206, 91–99.
 - Hirsch, H., Wypior C., von Wehrden H., Wesche K., Renison D., & Hensen I. (2012). Germination performance of native and non-native *Ulmus pumila* populations. *NeoBiota*. 15, 53–68.
 - Song, J., Lim H., & Jang K. (2011). Germination Behaviors and Seed Longevities of Three *Ulmus* Species in Korea. *Korean Journal of Plant Research*. 24(4), 438-444.
-

16. Does this plant produce viable seed within the first three years (for an herbaceous species) to five years (for a woody species) after germination?

- Answer: **No**, which contributes **0** point(s) to the total PRE score.
- The *screeners* has a **High** confidence in this answer based on the available literature.

Answer / Justification:

Ulmus pumila is listed as requiring 8 years to be minimum seed-bearing age (Bonner & Karrfalt, 2008). *Ulmus pumila* can produce seed in as few as 10 years (Zalapa et al. 2010).



Reference(s):

- Bonner, F. T., & Karrfalt R. P. (2008). The Woody Plant Seed Manual. Agriculture Handbook 727,
 - Zalapa, J. E., Brunet J., & Guries R. P. (2010). The extent of hybridization and its impact on the genetic diversity and population structure of an invasive tree, *Ulmus pumila* (Ulmaceae). *Evolutionary Applications*. 3, 157–168.
-

17. Does this plant continuously produce seed for >3 months each year or does seed production occur more than once a year?

- Answer: **No**, which contributes **0** point(s) to the total PRE score.
- The *screeners* has a **Medium** confidence in this answer based on the available literature.

Answer / Justification:

Clusters of smooth, circular, winged, samara-type fruit with single seed in center occur from April to May (USDA, 2014).

Reference(s):

- USDA (2014). Field Guide for Managing Siberian Elm in the Southwest.
-

Dispersal (Questions 18 - 20)

18. Are the plant's propagules frequently dispersed long distance (>100 m) by mammals or birds or via domestic animals?

- Answer: **No**, which contributes **0** point(s) to the total PRE score.
- The *screeners* has a **Very Low** confidence in this answer based on the available literature.



Answer / Justification:

Siberian elm seed is primarily dispersed via wind, although seed may also be transported by water and animals (USDA, 2014). Detail is not available concerning the mode or distance of animal dispersal.

Reference(s):

- USDA (2014). Field Guide for Managing Siberian Elm in the Southwest.
-

19. Are the plant's propagules frequently dispersed long distance (>100 m) by wind or water?

- Answer: **Yes**, which contributes **1** point(s) to the total PRE score.
- The *screener* has a **Very High** confidence in this answer based on the available literature.

Answer / Justification:

Wind carries seed to distant areas where new colonies can form. Seeds are produced early in spring and spread by the wind (TexasInvasives, 2023). Siberian elm seed is primarily dispersed via wind, although seed may also be transported by water and animals (USDA, 2014). Field studies by Blass et al. (2010) found windborne dispersal of *U. pumila* seeds exceeded 100 m. The authors also found that 99% of *U. pumila* seeds remained afloat in water for 24 hours, suggesting a capacity for long-distance water-borne dispersal.

Reference(s):

- TexasInvasives (2023). Texas Invasives.
 - USDA (2014). Field Guide for Managing Siberian Elm in the Southwest.
 - Blass, C., Ronnenberg K., Tackenberg O., Hensen I., & Wesche K. (2010). The relative importance of different seed dispersal modes in dry Mongolian rangelands. *Journal of Arid Environments*. 74, 991–997.
-

20. Are the plant's propagules frequently dispersed via contaminated seed (agriculture or wildflower packets), equipment, vehicles, boats or clothing/shoes?

- Answer: **Yes**, which contributes **1** point(s) to the total PRE score.
- The *screener* has a **High** confidence in this answer based on the available literature.



Answer / Justification:

Seed may be carried long distances by adhering to surfaces and undercarriages of logging equipment and vehicles (USDA, 2014).

Reference(s):

- USDA (2014). Field Guide for Managing Siberian Elm in the Southwest.
-

Total PRE Score

PRE Score: 16 -- High Potential Risk

Confidence: 77 / 100

Questions answered: 20 of 20 -- Valid (80% or more questions answered)

PRE Score Legend

The PRE Score is calculated by adding the point totals for each (answered) question.

< 13 : Low Potential Risk

13 - 15 : Moderate Potential Risk

> 15 : High Potential Risk

Questions Answered Legend

It is important to answer at least 16 questions to consider a PRE Score as "valid".

>= 16 : valid (80% or more questions answered)

<= 15 : invalid (not enough questions answered)

Organization Ownership and Content Privacy

Organization: 2022 Western IPM Grant Project

Content Privacy: Public



Evaluation Reviewers

The PRE approach is to base decisions on science and make decisions by consensus of diverse horticultural stakeholders. The literature review and process of answering PRE's questions are based on science; the decisions of which plants to prioritize are based on consensus. To ensure this process is in place and that PRE is collaborative, volunteer stakeholders are recruited from each region to review evaluations. The following experts in their profession (plant science, conservation, or horticultural trade) have participated as volunteer PRE reviewers for this evaluation:

- | | |
|-----------------------|-------------------|
| • Michael Chamberland | February 26, 2023 |
| • Ron Vanderhoff | February 26, 2023 |
| • Alex Simmons | February 23, 2023 |
| • Jutta Burger | February 22, 2023 |

This evaluation has a total of 4 reviewer(s).



Evaluation Issues

The following section lists all public issues for this evaluation. Issues provide a way for stakeholder reviewers to communicate any concerns or suggestions they might have with the plant or evaluation. Please email info@plantright.org if additional action is required to resolve open issues.

Issue ID # 8903

Date Created: February 26, 2023 - 8:26am

Date Updated: February 26, 2023 - 11:25am

Submitted by: Ron Vanderhoff

Status: Fixed

Type: Suggestion

Severity: Minor

Scope: Q16. Does this plant produce viable seed within the first three years (for an herbaceous species) to five years (for a woody species) after germination?

Issue Description

Agree. If you would like it, here is another reference, this one stating 10 years to seed production: <https://onlinelibrary.wiley.com/doi/full/10.1111/j.1752-4571.2009.00106.x> - Ron

Issue Resolution (Screener's Response to Issue)

I have added that reference. - Michael Chamberland

Issue ID # 8902

Date Created: February 26, 2023 - 8:12am

Date Updated: February 26, 2023 - 10:32am

Submitted by: Ron Vanderhoff

Status: Fixed



Type: Suggestion

Severity: Minor

Scope: Q06. Is the species found predominately in a climate matching the region of concern?

Issue Description

Using the climate matching maps, you might consider moving the confidence at least up from a Medium to a High. Looks like the large majority of its distribution is NOT a match. - Ron

Issue Resolution (Screener's Response to Issue)

I have adjusted to High. - Michael Chamberland

Issue ID # 8901

Date Created: February 26, 2023 - 8:09am

Date Updated: February 26, 2023 - 10:31am

Submitted by: Ron Vanderhoff

Status: Fixed

Type: Suggestion

Severity: Minor

Scope: Q05. Are other species of the same genus invasive in a similar climate?

Issue Description

I'm not exactly sure what to do here . . .

On your pending evaluation of *U. parvifolia* it was called into question as to whether that was indeed an invasive species in this climate and there was some evidence and suggestion that indeed it was. If so, then that species could be a justification for a Yes answer here. However, that evaluation is still unpublished and in review. So, an odd quandary. Maybe Jutta can weigh in. - Ron

Issue Resolution (Screener's Response to Issue)

The results of the preliminary PRE for *U. parvifolia* have not supported regarding *U. parvifolia* as reaching the extent of naturalization meeting the definition of invasive as used by the PRE, so I have not changed the answer. - Michael Chamberland



Issue ID # 8900

Date Created: February 26, 2023 - 8:04am

Date Updated: February 26, 2023 - 10:15am

Submitted by: Ron Vanderhoff

Status: Fixed

Type: Suggestion

Severity: Minor

Scope: Q04. Is the species (or cultivar or variety) noted as being invasive in the US or world in a similar climate?

Issue Description

I also suspect this could be upgraded to a confidence of High. If you were to list a few more of the climate matching areas I think this would be an easy justification. Its invasive status in Argentina alone, which is a climate match, may even be enough. - Ron

Issue Resolution (Screener's Response to Issue)

I have adjusted this to Very High with the addition of a reference to the New Mexico Noxious Weed List. NM is the only state to list this as a Noxious Weed. - Michael Chamberland

Issue ID # 8899

Date Created: February 26, 2023 - 7:55am

Date Updated: February 26, 2023 - 10:04am

Submitted by: Ron Vanderhoff

Status: Fixed

Type: Suggestion

Severity: Minor



Scope: Q03. Is the species (or cultivar or variety) noted as being invasive in the U.S. or world?

Issue Description

I think the confidence here could be upgraded to Very High. There is abundant information about the invasiveness of this species in many parts of the world. Here is a good reference stating it being "invasive" in 41 of the 50 U.S. states as well as Canada, Mexico, Argentina, and Spain: <https://onlinelibrary.wiley.com/doi/full/10.1111/j.1752-4571.2009.00106.x> - Ron

Issue Resolution (Screener's Response to Issue)

I have adjusted to Very High. However the definition of invasive used in the publication is not the same as invasive defined by the PRE. - Michael Chamberland

Issue ID # 8866

Date Created: February 22, 2023 - 2:36pm

Date Updated: February 26, 2023 - 9:58am

Submitted by: Jutta Burger

Status: Fixed

Type: Suggestion

Severity: Major

Scope: Q18. Are the plant's propagules dispersed long distance (>100 m) by mammals or birds or via domestic animals?

Issue Description

It doesn't seem that there is enough support for a "yes" answer to this question. The reference below does not support seed movement by mammals.

Blass, C., Ronnenberg K., Tackenberg O., Hensen I., & Wesche K. (2010). [The relative importance of different seed dispersal modes in dry Mongolian rangelands](#). *Journal of Arid Environments*. 74, 991–997.

- Jutta

Issue Resolution (Screener's Response to Issue)

I have changed the answer to No. - Michael Chamberland



Issue ID # 8865

Date Created: February 22, 2023 - 2:21pm

Date Updated: February 26, 2023 - 10:50am

Submitted by: Jutta Burger

Status: Fixed

Type: Suggestion

Severity: Minor

Scope: Q08. Is the plant noted as promoting fire and/or changing fire regimes?

Issue Description

Add something more in the justification about why you think it does not change fire regimes. This could include the apparent absence of resins and seedling vulnerability to fire. You can also mention that you found no sources that refer to it changing fire frequency or intensity. The current explanation only refers to the use of fire to control the plant. - Jutta

Issue Resolution (Screener's Response to Issue)

I have added some of the recommended justifications. - Michael Chamberland

Issue ID # 8864

Date Created: February 22, 2023 - 2:15pm

Date Updated: February 26, 2023 - 10:52am

Submitted by: Jutta Burger

Status: Fixed

Type: Comment

Severity: Minor

Scope: Q08. Is the plant noted as promoting fire and/or changing fire regimes?



Issue Description

Correct grammar in last sentence. - Jutta

Issue Resolution (Screener's Response to Issue)

Done. - Michael Chamberland

Issue ID # 8863

Date Created: February 22, 2023 - 2:10pm

Date Updated: February 26, 2023 - 10:47am

Submitted by: Jutta Burger

Status: Fixed

Type: Comment

Severity: Minor

Scope: Q07. Does this plant displace native plants and dominate the plant community in areas where it has been established?

Issue Description

First two sentences are are redundant to one another. - Jutta

Issue Resolution (Screener's Response to Issue)

I have edited this to be shorter. - Michael Chamberland

Issue ID # 8862

Date Created: February 22, 2023 - 2:07pm

Date Updated: February 26, 2023 - 10:38am



Submitted by: Jutta Burger

Status: Fixed

Type: Suggestion

Severity: Minor

Scope: Q06. Is the species found predominately in a climate matching the region of concern?

Issue Description

Make reference to GBIF or another data source for distribution and the climate match tool output.

Issue Resolution (Screener's Response to Issue)

I have added the GBIF reference. - Michael Chamberland



About PRE and this Plant Evaluation Report

The Plant Risk Evaluator (PRE) is an online database and platform designed to assess the risk of a plant becoming invasive in a given region. This tool offers many benefits, and we encourage you to visit the PRE website (<https://pretool.org>) for more information.

If you would like to learn more about PRE, please email us at info@plantright.org, requesting a PRE Account.

PRE beta funding was provided by Sustainable Conservation (<https://www.suscon.org/>) and a USDA Farm Bill grant. Additional funding has been provided by the Western Integrated Pest Management Center.