



***Plant Risk Evaluator -- PRE™  
Evaluation Report***

***Weigela florida 'Red Prince' -- Illinois***

***2017 Farm Bill PRE Project***

**PRE Score:** 7 -- Accept (low risk of invasiveness)

**Confidence:** 51 / 100

**Questions answered:** 18 of 20 -- Valid (80% or more questions answered)

**Privacy:** Public

**Status:** Submitted

**Evaluation Date:** September 13, 2017

*This PDF was created on June 15, 2018*



## Plant Evaluated

*Weigela florida* 'Red Prince'



Image by MBOT



## Evaluation Overview

A PRE™ screener conducted a literature review for this plant (*Weigela florida* 'Red Prince') 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

*Weigela florida* 'Red Prince' presents a low risk of invasiveness in Illinois. No citations as an invasive species could be found for the genus. Confidence levels for this evaluation are lowered because there was not much information specific to the cultivar, especially for seed production.

## General Information

**Status:** Submitted

**Screener:** Emily Russell

**Evaluation Date:** September 13, 2017

## Plant Information

**Plant:** *Weigela florida* 'Red Prince'

### **If the plant is a cultivar, how does its behavior differs from its parent's?**

'Red Prince' is known for its good cold hardiness (to zone 4), intense and persistent red flower color, and recurrent flowering in late summer. Considered to be the best red weigela cultivar. Introduced by Jack Weigle at Iowa State University in 1984.

## Regional Information

**Region Name:** Illinois



## **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 in an original article published at the University of California, Davis, and can be found on the PLOS One website, 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** points to the total PRE score.
- The *screeener* has a **Medium** confidence in this answer based on the available literature.

#### Answer / Justification:

*Weigela florida* has naturalized in Europe, India, and in Pennsylvania and Georgia in the United States.

#### Reference(s):

- DAISIE (2008). DAISIE European Alien Species Gateway: *Weigela florida*.
- Kartesz, J. T. (2015). The Biota of North America Program (BONAP).
- Randall, R. (2012). A Global Compendium of Weeds. 2nd Edition..
- Khuroo, A. A., Weber E., Malik A.. H., Reshi Z. A., & Dar G.. H. (2011). Altitudinal distribution patterns of the native and alien woody flora in Kashmir Himalaya, India. *Invasive Species*. 111, 967–977.

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#### 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** points to the total PRE score.
- The *screeener* has a **Medium** confidence in this answer based on the available literature.

#### Answer / Justification:

*Weigela florida* has been reported naturalized in Pennsylvania, which shares a climate with Illinois.



**Reference(s):**

- Kartesz, J. T. (2015). The Biota of North America Program (BONAP).
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**3. Is the species (or cultivar or variety) noted as being invasive in the U.S. or world?**

- Answer: **No**, which contributes **0** points to the total PRE score.
- The *screeener* has a **Medium** confidence in this answer based on the available literature.

**Answer / Justification:**

No citations as an invasive species were found for *Weigela florida*.

**Reference(s):**

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

- Answer: **No**, which contributes **0** points to the total PRE score.
- The *screeener* has a **Medium** confidence in this answer based on the available literature.

**Answer / Justification:**

No citations as an invasive species were found for *Weigela florida*.

**Reference(s):**

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

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

**Answer / Justification:**

No citations as an invasive species were found for the genus Weigela.

**Reference(s):**

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

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

**Answer / Justification:**

Weigela florida will grow in many climates.

**Reference(s):**

- GBIF (2017). Weigela florida (Bunge) A. DC. - Checklist View.
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## 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: **No**, which contributes **0** points to the total PRE score.
- The *screeners* has a **Low** confidence in this answer based on the available literature.

#### Answer / Justification:

Evidence is lacking that *Weigela florida* dominates plant communities.

#### Reference(s):

- [Anonymous] .
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### 8. Is the plant noted as promoting fire and/or changing fire regimes?

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

#### Answer / Justification:

There is no evidence for changing fire regimes.

#### Reference(s):

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

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





**Answer / Justification:**

No health risks to humans, animals, or grazing systems have been documented.

**Reference(s):**

- [Anonymous] .
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**10. Does the plant produce impenetrable thickets, blocking or slowing movement of animals, livestock, or humans?**

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

**Answer / Justification:**

There are no reports of impenetrable thickets in the literature.

**Reference(s):**

- [Anonymous] .
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**Reproductive Strategies (Questions 11 - 17)**

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

- Answer: **Yes**, which contributes **1** points to the total PRE score.
- The *screeener* has a **High** confidence in this answer based on the available literature.

**Answer / Justification:**

Weigela florida spreads vegetatively via root suckers. It is also easy to propagate by layering.



**Reference(s):**

- [Anonymous] .
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**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** points to the total PRE score.
- The *screeener* has a **Low** confidence in this answer based on the available literature.

**Answer / Justification:**

Dirr says: "one of the easiest plants to root." But there is no evidence it reproduces from fragments in the wild.

**Reference(s):**

- Dirr, M. A. (1998). Manual of Woody Landscape Plants: Their Identification, Ornamental Characteristics, Culture, Propagation and Uses.
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**13. Does the species (or cultivar or variety) commonly produce viable seed?**

- Answer: **Yes**, which contributes **1** points to the total PRE score.
- The *screeener* has a **Medium** confidence in this answer based on the available literature.

**Answer / Justification:**

The species produces viable seed; no information for the cultivar 'Red Prince' could be found.

**Reference(s):**

- Dirr, M. A. (1998). Manual of Woody Landscape Plants: Their Identification, Ornamental Characteristics, Culture, Propagation and Uses.
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**14. Does this plant produce copious viable seeds each year (> 1000)?**

**Answer / Justification:**

No estimates of seed quantity could be found.

**Reference(s):**

- [Anonymous] .
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**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** points to the total PRE score.
- The *screeners* has a **Low** confidence in this answer based on the available literature.

**Answer / Justification:**

There is not much information available about growing Weigela from seed in the literature since it is so easily propagated from cuttings. Description from a seed company: "Pre-treatment: not required. Germination range: 30-50%" (Schumacher)

**Reference(s):**

- F.W. Schumacher Co. (2017). Weigela florida (Weigela) Seed Description.
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**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?**

**Reference(s):**

- [Anonymous] .



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

- Answer: **Yes**, which contributes **1** points to the total PRE score.
- The *screeener* has a **Medium** confidence in this answer based on the available literature.

**Answer / Justification:**

"It features funnel-shaped red flowers (to 1.5" long) that bloom in mid to late spring, with a scattered and much less significant repeat bloom sometimes occurring in late summer to early autumn."

**Reference(s):**

- Missouri Botanical Garden (2017). Weigela 'Red Prince' - Plant Finder.
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**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** points to the total PRE score.
- The *screeener* has a **Low** confidence in this answer based on the available literature.

**Answer / Justification:**

There is no evidence of long distance dispersal by animals.

**Reference(s):**

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

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

**Answer / Justification:**

Small seeds could be dispersed by wind, but there are no estimates of distance.

**Reference(s):**

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

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

**Answer / Justification:**

There is no evidence of accidental dispersal by humans.

**Reference(s):**

- [Anonymous] .
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**Total PRE Score**

**PRE Score:** 7 -- Accept (low risk of invasiveness)

**Confidence:** 51 / 100

**Questions answered:** 18 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 : accept (low risk of invasiveness)

13 - 15 : evaluate further

> 15 : reject (high risk of invasiveness)

## **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:** 2017 Farm Bill PRE Project

**Content Privacy:** Public





## **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 [PlantRight@suscon.org](mailto:PlantRight@suscon.org) if additional action is required to resolve open issues.

There are currently no issues associated with this evaluation.





## **About PRE and this Plant Evaluation Report**

The PlantRight Plant Risk Evaluator -- PRE is an online database and platform enabling those involved in non-native, terrestrial plant production to know before they grow if a plant poses a regional invasive risk. This tool offers many benefits, and we encourage you to visit the PRE website (<https://pre.ice.ucdavis.edu>) for more information.

If you are a nursery trade association, or involved in the research, development or distribution of horticultural plants we invite you to join the PRE community. If you are a plant scientist, affiliated with a horticultural college or botanic garden, and would like to learn more about becoming a PRE Screener, please drop us an email, [PlantRight@suscon.org](mailto:PlantRight@suscon.org), requesting a PRE Account.

PRE beta funding is provided by Sustainable Conservation (<http://www.suscon.org/>) and a USDA Farm Bill grant.