

Taxon: <i>Euphorbia 'Blackbird'</i>	Family: Euphorbiaceae
Common Name(s): blackbird spurge cushion spurge 'Blackbird'	Synonym(s): <i>E. amygdaloides</i> x <i>E. martinii</i>

Assessor: Chuck Chimera	Status: Assessor Approved	End Date: 9 Jun 2017
WRA Score: -5.0	Designation: L	Rating: Low Risk

Keywords: Cultivar, Ornamental, Unarmed, Toxic Sap, Seedless

Qsn #	Question	Answer Option	Answer
101	Is the species highly domesticated?	y=-3, n=0	n
102	Has the species become naturalized where grown?		
103	Does the species have weedy races?		
201	Species suited to tropical or subtropical climate(s) - If island is primarily wet habitat, then substitute "wet tropical" for "tropical or subtropical"	(0-low; 1-intermediate; 2-high) (See Appendix 2)	Low
202	Quality of climate match data	(0-low; 1-intermediate; 2-high) (See Appendix 2)	Low
203	Broad climate suitability (environmental versatility)	y=1, n=0	y
204	Native or naturalized in regions with tropical or subtropical climates	y=1, n=0	n
205	Does the species have a history of repeated introductions outside its natural range?	y=-2, ?=-1, n=0	y
301	Naturalized beyond native range	y = 1*multiplier (see Appendix 2), n= question 205	n
302	Garden/amenity/disturbance weed	n=0, y = 1*multiplier (see Appendix 2)	n
303	Agricultural/forestry/horticultural weed	n=0, y = 2*multiplier (see Appendix 2)	n
304	Environmental weed	n=0, y = 2*multiplier (see Appendix 2)	n
305	Congeneric weed	n=0, y = 1*multiplier (see Appendix 2)	y
401	Produces spines, thorns or burrs	y=1, n=0	n
402	Allelopathic		
403	Parasitic	y=1, n=0	n
404	Unpalatable to grazing animals	y=1, n=-1	y
405	Toxic to animals	y=1, n=0	y
406	Host for recognized pests and pathogens		
407	Causes allergies or is otherwise toxic to humans	y=1, n=0	y
408	Creates a fire hazard in natural ecosystems		
409	Is a shade tolerant plant at some stage of its life cycle		

Qsn #	Question	Answer Option	Answer
410	Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)	y=1, n=0	y
411	Climbing or smothering growth habit	y=1, n=0	n
412	Forms dense thickets	y=1, n=0	n
501	Aquatic	y=5, n=0	n
502	Grass	y=1, n=0	n
503	Nitrogen fixing woody plant	y=1, n=0	n
504	Geophyte (herbaceous with underground storage organs -- bulbs, corms, or tubers)	y=1, n=0	n
601	Evidence of substantial reproductive failure in native habitat	y=1, n=0	n
602	Produces viable seed	y=1, n=-1	n
603	Hybridizes naturally		
604	Self-compatible or apomictic		
605	Requires specialist pollinators		
606	Reproduction by vegetative fragmentation	y=1, n=-1	n
607	Minimum generative time (years)		
701	Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)	y=1, n=-1	n
702	Propagules dispersed intentionally by people	y=1, n=-1	y
703	Propagules likely to disperse as a produce contaminant	y=1, n=-1	n
704	Propagules adapted to wind dispersal	y=1, n=-1	n
705	Propagules water dispersed	y=1, n=-1	n
706	Propagules bird dispersed	y=1, n=-1	n
707	Propagules dispersed by other animals (externally)	y=1, n=-1	n
708	Propagules survive passage through the gut	y=1, n=-1	n
801	Prolific seed production (>1000/m2)	y=1, n=-1	n
802	Evidence that a persistent propagule bank is formed (>1 yr)	y=1, n=-1	n
803	Well controlled by herbicides		
804	Tolerates, or benefits from, mutilation, cultivation, or fire		
805	Effective natural enemies present locally (e.g. introduced biocontrol agents)		

Supporting Data:

Qsn #	Question	Answer
101	Is the species highly domesticated?	n
	Source(s)	Notes
	San Marcos Growers. 2017. <i>Euphorbia Blackbird</i> PP17,178 ['Nothowlee'] - Blackbird Spurge. http://www.smgrowers.com/ . [Accessed 7 Jun 2017]	[A cultivar produced from an artificial hybrid, but not domesticated] "This plant is from Mark Howard and Simon Leeding of Notcutts Nursery in Woodbridge, Suffolk, England where it was found as a sport in a crop of their popular <i>Euphorbia Red Wing</i> ['Charam'], itself a <i>Euphorbia amygdaloides</i> and <i>Euphorbia martinii</i> cross. It differs from Red Wing by having much darker foliage. It was granted US Plant Patent 17,178 on October 31, 2006 and is being marketed in the United States by PlantHaven. It was a Gold Medal winner at the 2004 Plantarium in the Netherlands, one of the worlds largest nursery trade shows."

102	Has the species become naturalized where grown?	
	Source(s)	Notes
	WRA Specialist. 2017. Personal Communication	NA

103	Does the species have weedy races?	
	Source(s)	Notes
	WRA Specialist. 2017. Personal Communication	NA

201	Species suited to tropical or subtropical climate(s) - If island is primarily wet habitat, then substitute "wet tropical" for "tropical or subtropical"	Low
	Source(s)	Notes
	Glenn, D. (2010). U.S. Patent No. PP21,401. Washington, DC: U.S. Patent and Trademark Office	" <i>Euphorbia x martinii</i> [ASCOT RAINBOW] was discovered as a naturally occurring branch sport of the parent an individual <i>Euphorbia martinii</i> I." ... "Hardiness: Classified at least as hardy as USDA Hardiness Zone 6." [<i>Euphorbia x martinii</i> parents are predominantly temperate species]
	San Marcos Growers. 2017. <i>Euphorbia Blackbird</i> PP17,178 ['Nothowlee'] - Blackbird Spurge. http://www.smgrowers.com/ . [Accessed 7 Jun 2017]	"Parentage: (<i>E. amygdaloides</i> x <i>E. martinii</i>)"
	USDA, ARS, Germplasm Resources Information Network. 2017. National Plant Germplasm System [Online Database]. http://www.ars-grin.gov/npgs/index.html . [Accessed 7 Jun 2017]	<i>Euphorbia amygdaloides</i> native to regions with temperate & Mediterranean climates.

202	Quality of climate match data	Low
	Source(s)	Notes
	WRA Specialist. 2017. Personal Communication	A hybrid cultivar. Parentage native to temperate and Mediterranean regions

Qsn #	Question	Answer
203	Broad climate suitability (environmental versatility)	y
	Source(s)	Notes
	Dave's Garden. 2017. Cushion Spurge 'Blackbird'. Euphorbia. http://davesgarden.com/guides/pf/go/164290/ . [Accessed 7 Jun 2017]	"Hardiness: USDA Zone 6a: to -23.3 °C (-10 °F) USDA Zone 6b: to -20.5 °C (-5 °F) USDA Zone 7a: to -17.7 °C (0 °F) USDA Zone 7b: to -14.9 °C (5 °F) USDA Zone 8a: to -12.2 °C (10 °F) USDA Zone 8b: to -9.4 °C (15 °F) USDA Zone 9a: to -6.6 °C (20 °F) USDA Zone 9b: to -3.8 °C (25 °F)"
	San Marcos Growers. 2017. Euphorbia Blackbird PP17,178 ['Nothowlee'] - Blackbird Spurge. http://www.smgrowers.com/ . [Accessed 7 Jun 2017]	"Winter Hardiness: 0-10° F"

204	Native or naturalized in regions with tropical or subtropical climates	n
	Source(s)	Notes
	San Marcos Growers. 2017. Euphorbia Blackbird PP17,178 ['Nothowlee'] - Blackbird Spurge. http://www.smgrowers.com/ . [Accessed 7 Jun 2017]	[No evidence] "This plant is from Mark Howard and Simon Leeding of Notcutts Nursery in Woodbridge, Suffolk, England where it was found as a sport in a crop of their popular Euphorbia Red Wing ['Charam'], itself a Euphorbia amygdaloides and Euphorbia martinii cross. It differs from Red Wing by having much darker foliage. It was granted US Plant Patent 17,178 on October 31, 2006 and is being marketed in the United States by PlantHaven. It was a Gold Medal winner at the 2004 Plantarium in the Netherlands, one of the worlds largest nursery trade shows."
	Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	No evidence

205	Does the species have a history of repeated introductions outside its natural range?	y
	Source(s)	Notes
	Dave's Garden. 2017. Cushion Spurge 'Blackbird'. Euphorbia. http://davesgarden.com/guides/pf/go/164290/ . [Accessed 7 Jun 2017]	"This plant has been said to grow in the following regions: Brea, California Carlsbad, California Glendale, California La Canada Flintridge, California Oakhurst, California San Jose, California (2 reports) San Leandro, California Santa Barbara, California Santa Rosa, California Tallahassee, Florida Wichita, Kansas Catonsville, Maryland Cockeysville, Maryland Madison, Mississippi Sarcoxie, Missouri Riverhead, New York Elizabeth City, North Carolina Raleigh, North Carolina Tulsa, Oklahoma Portland, Oregon Carlisle, Pennsylvania Norristown, Pennsylvania Wynnewood, Pennsylvania Lexington, South Carolina Sumter, South Carolina Clarksville, Tennessee Hendersonville, Tennessee Atlanta, Texas Austin, Texas Dallas, Texas Lexington, Virginia Graham, Washington Olympia, Washington Vancouver, Washington"

301	Naturalized beyond native range	n
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Qsn #	Question	Answer
	Source(s)	Notes
	Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	No evidence to date
	Wagner, W.L., Herbst, D.R.& Lorence, D.H. 2017. Flora of the Hawaiian Islands. Smithsonian Institution, Washington, D.C. http://botany.si.edu/ . [Accessed 7 Jun 2017]	No evidence to date

302	Garden/amenity/disturbance weed	n
	Source(s)	Notes
	Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	No evidence

303	Agricultural/forestry/horticultural weed	n
	Source(s)	Notes
	Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	No evidence

304	Environmental weed	n
	Source(s)	Notes
	Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	No evidence

305	Congeneric weed	y
	Source(s)	Notes
	Weber, E. 2003. Invasive Plant Species of the World. A Reference Guide to Environmental Weeds. CABI Publishing, Wallingford, UK	"Euphorbia esula ... spreads by seeds and by vegetative growth from the rootstock. It rapidly expands and forms large and dense patches that displace native grasses and forbs."
	Randall, R.P. (2017). A Global Compendium of Weeds. 3rd Edition. Perth, Western Australia. R.P. Randall	Numerous Euphorbia species have become invasive weeds

401	Produces spines, thorns or burrs	n
	Source(s)	Notes
	San Marcos Growers. 2017. Euphorbia Blackbird PP17,178 ['Nothowlee'] - Blackbird Spurge. http://www.smgrowers.com/ . [Accessed 7 Jun 2017]	[No evidence] "This evergreen perennial subshrub has a compact, bushy habit to 18 to 22 inches tall by equal width with exceptionally dark purple velvety foliage, especially when grown in full sun, and heads of yellow-green flowers (bracts) in spring on reddish stems."

402	Allelopathic	
	Source(s)	Notes
	WRA Specialist. 2017. Personal Communication	Unknown

Qsn #	Question	Answer
403	Parasitic	n
	Source(s)	Notes
	USDA, ARS, Germplasm Resources Information Network. 2017. National Plant Germplasm System [Online Database]. http://www.ars-grin.gov/npgs/index.html . [Accessed 9 Jun 2017]	Family: Euphorbiaceae Subfamily: Euphorbioideae Tribe: Euphorbieae Subtribe: Euphorbiinae

404	Unpalatable to grazing animals	y
	Source(s)	Notes
	Gold Rush Nursery. 2017. <i>Euphorbia 'Blackbird'</i> Blackbird spurge. http://www.goldrushnursery.com/index.cfm/fuseaction/plants.plantDetail/plant_id/231/index.htm . [Accessed 7 Jun 2017]	"Deer and rabbit resistant." ... "Additional: Sap is a skin irritant. Wear gloves when handling. Not recommended for gardens where children are present." [Sap likely deters browsing]

405	Toxic to animals	y
	Source(s)	Notes
	Dave's Garden. 2017. Cushion Spurge ' <i>Blackbird</i> '. <i>Euphorbia</i> . http://davesgarden.com/guides/pf/go/164290/ . [Accessed 9 Jun 2017]	"Danger: Handling plant may cause skin irritation or allergic reaction"
	Gold Rush Nursery. 2017. <i>Euphorbia 'Blackbird'</i> Blackbird spurge. http://www.goldrushnursery.com/index.cfm/fuseaction/plants.plantDetail/plant_id/231/index.htm . [Accessed 7 Jun 2017]	"Deer and rabbit resistant. Additional: Sap is a skin irritant. Wear gloves when handling. Not recommended for gardens where children are present."

406	Host for recognized pests and pathogens	
	Source(s)	Notes
	Pilon, P. 2007. Perennial Solutions: <i>Euphorbia 'Blackbird'</i> . May 2007. http://www.gpnmag.com/article/perennial-solutions-euphorbia-blackbird/ . [Accessed 9 Jun 2017]	[Host of general, widespread pests] " <i>Euphorbia</i> is susceptible to several insect pests including aphids, caterpillars, mealybugs, spider mites and whiteflies, but rarely do any of these pests become problematic. Although diseases such as anthracnose, Botrytis, leaf spots, Phytophthora, powdery mildew, Rhizoctonia and rust may be observed under certain growing conditions, <i>euphorbia</i> can generally be grown free of these plant pathogens. None of these insect pests or diseases requires preventative control strategies. Growers should utilize routine scouting programs to detect their presence early and determine if and when control strategies are necessary."

407	Causes allergies or is otherwise toxic to humans	y
	Source(s)	Notes
	Dave's Garden. 2017. Cushion Spurge ' <i>Blackbird</i> '. <i>Euphorbia</i> . http://davesgarden.com/guides/pf/go/164290/ . [Accessed 9 Jun 2017]	"Danger: Handling plant may cause skin irritation or allergic reaction"

Qsn #	Question	Answer
	Gold Rush Nursery. 2017. <i>Euphorbia 'Blackbird'</i> Blackbird spurge. http://www.goldrushnursery.com/index.cfm/fuseaction/plants.plantDetail/plant_id/231/index.htm . [Accessed 9 Jun 2017]	"Sap is a skin irritant. Wear gloves when handling. Not recommended for gardens where children are present."

408	Creates a fire hazard in natural ecosystems	
	Source(s)	Notes
	WRA Specialist. 2017. Personal Communication	Flammability unknown. An artificial cultivar with no naturally occurring populations known.

409	Is a shade tolerant plant at some stage of its life cycle	
	Source(s)	Notes
	Pilon, P. 2007. Perennial Solutions: <i>Euphorbia 'Blackbird'</i> . May 2007. http://www.gpnmag.com/article/perennial-solutions-euphorbia-blackbird/ . [Accessed 9 Jun 2017]	"It thrives in locations with full sun to partial shade throughout USDA Hardiness Zones 6-9. It is worth noting that the characteristic dark-purple foliage will take on a lighter coloration when plants are produced at lower light levels."
	Gold Rush Nursery. 2017. <i>Euphorbia 'Blackbird'</i> Blackbird spurge. http://www.goldrushnursery.com/index.cfm/fuseaction/plants.plantDetail/plant_id/231/index.htm . [Accessed 9 Jun 2017]	"Plant 'Blackbird' in a spot where it'll get sun for at least half the day. If it's too shady, the leaves will turn dark green rather than deep purple."
	Dave's Garden. 2017. Cushion Spurge 'Blackbird'. <i>Euphorbia</i> . http://davesgarden.com/guides/pf/go/164290/ . [Accessed 9 Jun 2017]	"Sun Exposure: Full Sun"

410	Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)	y
	Source(s)	Notes
	Dave's Garden. 2017. Cushion Spurge 'Blackbird'. <i>Euphorbia</i> . http://davesgarden.com/guides/pf/go/164290/ . [Accessed 9 Jun 2017]	"Soil pH requirements: 6.1 to 6.5 (mildly acidic) 6.6 to 7.5 (neutral) 7.6 to 7.8 (mildly alkaline)"
	Home Design Directory. 2017. <i>Euphorbia characias 'Blackbird'</i> (<i>Euphorbia</i> , Spurge). https://www.homedesigndirectory.com.au/ . [Accessed 9 Jun 2017]	"Suits most soil types, provided they are free draining. Fertilise in spring with a slow release fertiliser."
	Babikow. 2017. <i>Euphorbia 'Blackbird'</i> Wood Spurge. http://www.babikow.com/plant/Euphorbia-Blackbird . [Accessed 9 Jun 2017]	"Tolerant of many soil types except waterlogged soils"

Qsn #	Question	Answer
411	Climbing or smothering growth habit	n
	Source(s)	Notes
	San Marcos Growers. 2017. <i>Euphorbia Blackbird</i> PP17,178 ['Nothowlee'] - Blackbird Spurge. http://www.smgrowers.com/ . [Accessed 8 Jun 2017]	"This evergreen perennial subshrub has a compact, bushy habit to 18 to 22 inches tall by equal width with exceptionally dark purple velvety foliage, especially when grown in full sun, and heads of yellow-green flowers (bracts) in spring on reddish stems."
412	Forms dense thickets	n
	Source(s)	Notes
	WRA Specialist. 2017. Personal Communication	No evidence to date. Only known from cultivation.
501	Aquatic	n
	Source(s)	Notes
	San Marcos Growers. 2017. <i>Euphorbia Blackbird</i> PP17,178 ['Nothowlee'] - Blackbird Spurge. http://www.smgrowers.com/ . [Accessed 8 Jun 2017]	[Terrestrial] "This evergreen perennial subshrub has a compact, bushy habit to 18 to 22 inches tall by equal width with exceptionally dark purple velvety foliage, especially when grown in full sun, and heads of yellow-green flowers (bracts) in spring on reddish stems."
502	Grass	n
	Source(s)	Notes
	USDA, ARS, Germplasm Resources Information Network. 2017. National Plant Germplasm System [Online Database]. http://www.ars-grin.gov/npgs/index.html . [Accessed 8 Jun 2017]	Family: Euphorbiaceae Subfamily: Euphorbioideae Tribe: Euphorbieae Subtribe: Euphorbiinae
503	Nitrogen fixing woody plant	n
	Source(s)	Notes
	USDA, ARS, Germplasm Resources Information Network. 2017. National Plant Germplasm System [Online Database]. http://www.ars-grin.gov/npgs/index.html . [Accessed 8 Jun 2017]	Family: Euphorbiaceae Subfamily: Euphorbioideae Tribe: Euphorbieae Subtribe: Euphorbiinae
504	Geophyte (herbaceous with underground storage organs -- bulbs, corms, or tubers)	n
	Source(s)	Notes
	San Marcos Growers. 2017. <i>Euphorbia Blackbird</i> PP17,178 ['Nothowlee'] - Blackbird Spurge. http://www.smgrowers.com/ . [Accessed 8 Jun 2017]	"This evergreen perennial subshrub has a compact, bushy habit to 18 to 22 inches tall by equal width with exceptionally dark purple velvety foliage, especially when grown in full sun, and heads of yellow-green flowers (bracts) in spring on reddish stems."
601	Evidence of substantial reproductive failure in native habitat	n

Qsn #	Question	Answer
	Source(s)	Notes
	San Marcos Growers. 2017. Euphorbia Blackbird PP17,178 ['Nothowlee'] - Blackbird Spurge. http://www.smgrowers.com/ . [Accessed 9 Jun 2017]	[NA] "This plant is from Mark Howard and Simon Leeding of Notcutts Nursery in Woodbridge, Suffolk, England where it was found as a sport in a crop of their popular Euphorbia Red Wing ['Charam'], itself a Euphorbia amygdaloides and Euphorbia martinii cross. It differs from Red Wing by having much darker foliage. It was granted US Plant Patent 17,178 on October 31, 2006 and is being marketed in the United States by PlantHaven. It was a Gold Medal winner at the 2004 Plantarium in the Netherlands, one of the worlds largest nursery trade shows."

602	Produces viable seed	n
	Source(s)	Notes
	Pilon, P. 2007. Perennial Solutions: Euphorbia 'Blackbird'. May 2007. http://www.gpnmag.com/article/perennial-solutions-euphorbia-blackbird/ . [Accessed 9 Jun 2017]	"'Blackbird' is vegetatively propagated by tip cuttings. Since a plant patent is being sought, unlicensed propagation of this cultivar is prohibited. Tip cuttings should measure approximately 11 2 inches and contain several nodes. The well-drained rooting media should be moistened prior to sticking. Euphorbia will root well without rooting hormones."
	Dave's Garden. 2017. Cushion Spurge 'Blackbird'. Euphorbia. http://davesgarden.com/guides/pf/go/164290/ . [Accessed 9 Jun 2017]	"Seed Collecting: N/A: plant does not set seed, flowers are sterile, or plants will not come true from seed"

603	Hybridizes naturally	
	Source(s)	Notes
	WRA Specialist. 2017. Personal Communication	Unknown. Hybridization documented in genus Euphorbia

604	Self-compatible or apomictic	
	Source(s)	Notes
	Kubitzki, K. (ed.). 2014. The Families and Genera of Vascular Plants. Vol. XI. Flowering Plants. Eudicots: Malpighiales. Springer, New York	[Unknown for Euphorbia 'BlackBird'] "In Euphorbia, which has bisexual pseudanthia, monoecious species are self-compatible, but in some species there is functional andromonoecy, with some early-produced cyathia lacking functional pistillate flowers (Narbona et al. 2002)."

605	Requires specialist pollinators	
	Source(s)	Notes
	Dave's Garden. 2017. Cushion Spurge 'Blackbird'. Euphorbia. http://davesgarden.com/guides/pf/go/164290/ . [Accessed]	"N/A: plant does not set seed, flowers are sterile, or plants will not come true from seed" [Unknown, but may be irrelevant given lack of seed production]

606	Reproduction by vegetative fragmentation	n
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Qsn #	Question	Answer
	Source(s)	Notes
	Pilon, P. 2007. Perennial Solutions: Euphorbia 'Blackbird'. May 2007. http://www.gpnmag.com/article/perennial-solutions-euphorbia-blackbird/ . [Accessed 9 Jun 2017]	""Blackbird' is vegetatively propagated by tip cuttings." [But no evidence of natural vegetative spread]

607	Minimum generative time (years)	
	Source(s)	Notes
	The National Gardening Association. 2017. Euphorbia 'Blackbird'. https://garden.org/plants/view/181228/Euphorbia-Blackbird/ . [Accessed 9 Jun 2017]	"Propagation: Seeds: Other info: Believed to be sterile" [Unknown, but irrelevant if no seeds are produced]

701	Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)	n
	Source(s)	Notes
	The National Gardening Association. 2017. Euphorbia 'Blackbird'. https://garden.org/plants/view/181228/Euphorbia-Blackbird/ . [Accessed 9 Jun 2017]	"Propagation: Seeds: Other info: Believed to be sterile"

702	Propagules dispersed intentionally by people	y
	Source(s)	Notes
	Dave's Garden. 2017. Cushion Spurge 'Blackbird'. Euphorbia. http://davesgarden.com/guides/pf/go/164290/ . [Accessed]	Cultivated and sold as an ornamental

703	Propagules likely to disperse as a produce contaminant	n
	Source(s)	Notes
	The National Gardening Association. 2017. Euphorbia 'Blackbird'. https://garden.org/plants/view/181228/Euphorbia-Blackbird/ . [Accessed 9 Jun 2017]	"Other info: Believed to be sterile" [No evidence]

704	Propagules adapted to wind dispersal	n
	Source(s)	Notes
	The National Gardening Association. 2017. Euphorbia 'Blackbird'. https://garden.org/plants/view/181228/Euphorbia-Blackbird/ . [Accessed 9 Jun 2017]	"Other info: Believed to be sterile"

705	Propagules water dispersed	n
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Qsn #	Question	Answer
	Source(s)	Notes
	The National Gardening Association. 2017. <i>Euphorbia 'Blackbird'</i> . https://garden.org/plants/view/181228/Euphorbia-Blackbird/ . [Accessed 9 Jun 2017]	"Other info: Believed to be sterile"

706	Propagules bird dispersed	n
	Source(s)	Notes
	The National Gardening Association. 2017. <i>Euphorbia 'Blackbird'</i> . https://garden.org/plants/view/181228/Euphorbia-Blackbird/ . [Accessed 9 Jun 2017]	"Other info: Believed to be sterile"

707	Propagules dispersed by other animals (externally)	n
	Source(s)	Notes
	The National Gardening Association. 2017. <i>Euphorbia 'Blackbird'</i> . https://garden.org/plants/view/181228/Euphorbia-Blackbird/ . [Accessed 9 Jun 2017]	"Other info: Believed to be sterile"

708	Propagules survive passage through the gut	n
	Source(s)	Notes
	The National Gardening Association. 2017. <i>Euphorbia 'Blackbird'</i> . https://garden.org/plants/view/181228/Euphorbia-Blackbird/ . [Accessed 9 Jun 2017]	"Other info: Believed to be sterile"

801	Prolific seed production (>1000/m2)	n
	Source(s)	Notes
	Dave's Garden. 2017. Cushion Spurge ' <i>Blackbird</i> '. <i>Euphorbia</i> . http://davesgarden.com/guides/pf/go/164290/ . [Accessed 9 Jun 2017]	"N/A: plant does not set seed, flowers are sterile, or plants will not come true from seed"
	The National Gardening Association. 2017. <i>Euphorbia 'Blackbird'</i> . https://garden.org/plants/view/181228/Euphorbia-Blackbird/ . [Accessed 9 Jun 2017]	"Other info: Believed to be sterile"

Qsn #	Question	Answer
802	Evidence that a persistent propagule bank is formed (>1 yr)	n
	Source(s)	Notes
	The National Gardening Association. 2017. <i>Euphorbia 'Blackbird'</i> . https://garden.org/plants/view/181228/Euphorbia-Blackbird/ . [Accessed 9 Jun 2017]	"N/A: plant does not set seed, flowers are sterile, or plants will not come true from seed"

803	Well controlled by herbicides	
	Source(s)	Notes
	WRA Specialist. 2017. Personal Communication	Unknown. No information on herbicide efficacy or chemical control of this species.

804	Tolerates, or benefits from, mutilation, cultivation, or fire	
	Source(s)	Notes
	Perennials.com. 2017. <i>Euphorbia Blackbird</i> . http://www.perennials.com/plants/euphorbia-blackbird.html . [Accessed 9 Jun 2017]	[Unknown. Tolerates light pruning] "Foliage may be pruned lightly in late spring, after flowering is finished, to maintain a compact, bushy habit."

805	Effective natural enemies present locally (e.g. introduced biocontrol agents)	
	Source(s)	Notes
	WRA Specialist. 2017. Personal Communication	Unknown

Summary of Risk Traits:

High Risk / Undesirable Traits

- Broad climate suitability (5 hardiness zones)
- Other Euphorbia species are invasive
- Sap toxic to animals and people
- Unpalatable to animals
- Tolerates many soil types

Low Risk Traits

- No reports of invasiveness or naturalization
- Unarmed (no spines, thorns, or burrs)
- Ornamental value
- Not reported to produce seeds
- Not reported to spread vegetatively
- Lack of seed production minimizes risk of inadvertent or long-distance dispersal