

Rights of Way are Key to Saving Bees

Its All About Flowers



Bees: Live Only on Flowers



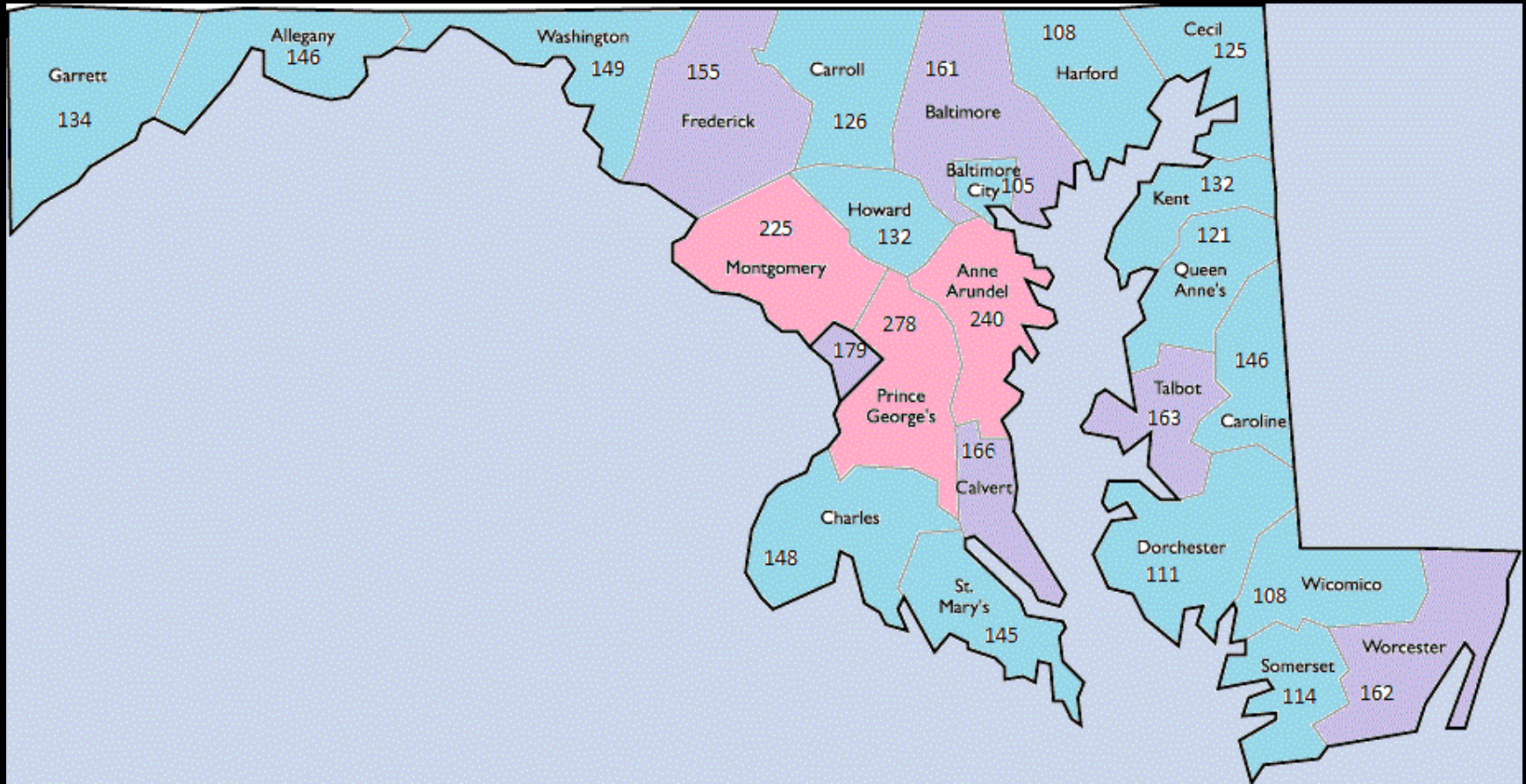
Honey Bees are from Mars





~450 Maryland Bees

Bee Species Total By County



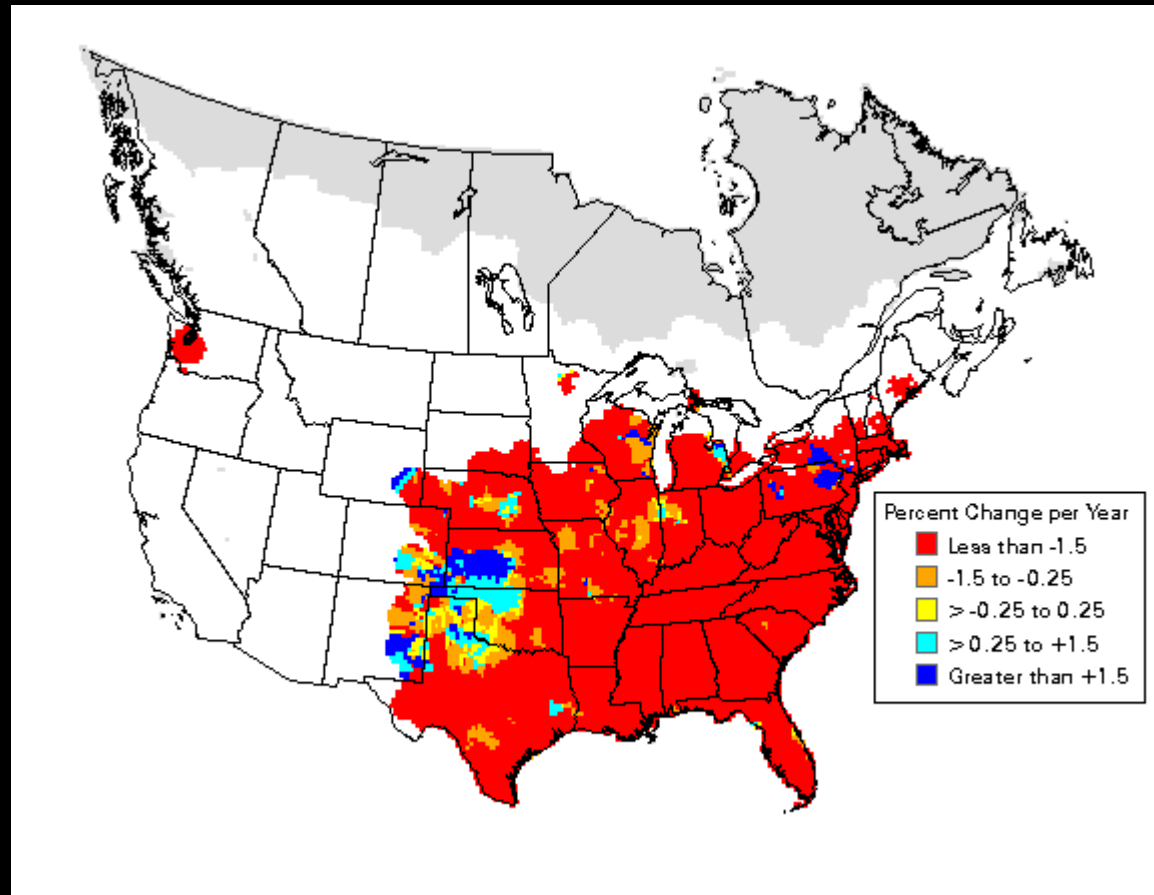


100+ Species Capacity at
Any Location



Most Native Bees Do Not/Can
Not Sting

The Current Pollinator Situation: Ask the Bobwhite





Got Flowers...You Got Bees

Different Kinds of Plants =
Different Kinds of Bees



[https://jarrodfoowler.com/specialist bees.html](https://jarrodfoowler.com/specialist%20bees.html)

Family: Subfamily: Tribe: Subtribe	Genus (Subgenus) species	Authority	Recorded states	Status	Season	Host plant Family / Genera
Andrenidae: Andreninae	<i>Andrena (Callandrena s.l.) accepta</i>	Viereck, 1916	FL-LA-MD-MS-NC-NJ-NY-SC-VA	Rare	Fall	Asteraceae, e.g. <i>Helianthus</i> L.
	<i>Andrena (Callandrena s.l.) aliciae</i>	Robertson, 1891	CT-DE-GA-MA-MD-NC-NJ-NY-PA-SC-VA-WV	Rare	Summer	Asteraceae, e.g. <i>Helianthus</i> L.
	<i>Andrena (Parandrena) andrenoides</i>	(Cresson, 1878)	AL-FL-GA-MD-NC-NJ-NY-SC-VA	Rare	Spring	<i>Salix</i> L.
	<i>Andrena (Scaphandrena) arabis</i>	Robertson, 1897	CT-DE-MA-MD-NC-NJ-NY-PA-VA-WV	Uncommon	Spring	<i>Arabis</i> L., <i>Cardamine</i> L.
	<i>Andrena (Callandrena s.l.) asteris</i>	Robertson, 1891	AL-CT-DE-GA-MA-MD-ME-MS-NC-NH-NJ-NY-PA-RI-VA-VT-WV	Common	Fall	<i>Solidago</i> L., <i>Symphytotrichum</i> Nees
	<i>Andrena (Callandrena s.l.) asteroides</i>	Mitchell, 1960	AL-GA-MD-MS-NC-NJ-PA-SC-VA	Rare	Fall	<i>Symphytotrichum</i> Nees
	<i>Andrena (Thysandrena) bisalicens</i>	Viereck, 1908	AL-CT-DE-GA-LA-MA-MD-ME-MS-NC-NH-NJ-NY-PA-RI-SC-VA-VT-WV	Common-Uncommon	Spring	<i>Salix</i> L.
	<i>Andrena (Callandrena s.l.) braccata</i>	Viereck, 1907	CT-GA-MA-MD-ME-NC-NH-NJ-NY-PA-RI-VA	Common-Rare	Fall	<i>Euthamia</i> Nutt. ex Cass., <i>Solidago</i> L.
	<i>Andrena (Conandrena) bradleyi</i>	Viereck, 1907	CT-DE-GA-MA-MD-ME-NC-NH-NJ-NY-PA-RI-SC-VA	Common-Uncommon	Spring	Ericaceae, e.g. <i>Gaylussacia</i> Kunth, <i>Vaccinium</i> L.
	<i>Andrena (Cnemidandrena) canadensis</i>	Dalla Torre, 1896	CT-MA-ME-MS-NC-NH-NJ-NY-RI-VA-VT	Common-Uncommon	Fall	Astereae, e.g. <i>Solidago</i> L.
	<i>Andrena (Andrena) carolina</i>	Viereck, 1909	AL-GA-CT-DE-MA-MD-ME-NC-NH-NJ-NY-PA-RI-VA-WV	Common-Uncommon	Spring	Ericaceae, e.g. <i>Vaccinium</i> L.
	<i>Andrena (Cnemidandrena) chromatricha</i>	Cockerell, 1899	NC-NY-PA-WV	Rare	Fall	Asteraceae
	<i>Andrena (Andrena) clarkella</i>	(Kirby, 1802)	CT-MA-ME-NH-NY-RI-VT-WV	Common-Rare	Spring	<i>Salix</i> L.



Bee Capacity?
Native Bee's Live
EVERYWHERE

An aerial photograph of a rural landscape. A paved road runs vertically through the center. To the left of the road is a dark, irregularly shaped pond. To the right of the road is a large, brown, rectangular field. Above the road, there is a Y-junction where a path or road branches off. The surrounding areas are covered in green vegetation and trees. The text 'Wet Meadows' is overlaid on the left side, 'Old Fields' on the top right, 'Field Edges' on the right side, 'Verges/Swales' on the left side near the road, and 'Feed Them With Flowers' at the bottom in red.

Wet Meadows

Old Fields

Field Edges

Verges/Swales

Feed Them With Flowers



Soybean Yield Boost



Throw out Your Lawn Mower





Simple First Step:
Mow Once a Year in March

5% of All Pollution Comes from Mowing Flowers




Shift ROW/Road-
Sides from Cool
Season Grasses to
Flower
Dominated
Native
Landscapes





Non-Native Plants: Bird Feeding



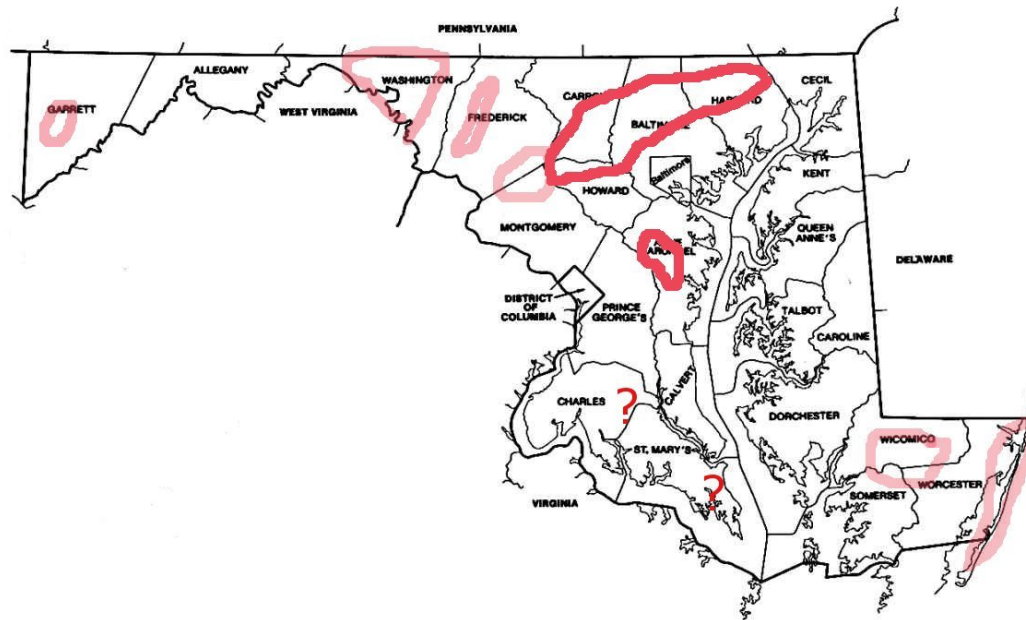
One Mower Deck Best Practice:
Mow Edges only
Once per Year

Microdeserts?

- Chronically dry and open lands



Maryland Barrens



Flickr/Instagram/Tumblr/Facebook =
@USGSBIML
sdroege@usgs.gov



<http://bio2.elmira.edu/fieldbio/beesofmarylandbookdraft3.pdf>