FREQUENTLY ASKED QUESTION ABOUT THE RUSTY PATCHED BUMBLE BEE (Bombus affinis)

How many bees are in PA?

- The rusty patched bumble bee, or *Bombus affinis*, is one of about 569 bees historically found in PA. There are 18 bees in the genus Bombus in PA.

Bombus affinis- http://bugguide.net/node/view/1054231

Is the Rusty patched bumble bee in PA?

- Historically, the Rusty-patched bumble bee was found throughout Pennsylvania. The most recent capture, from 2006, is too old to be considered extant at this time (extant sites are considered 2007 – present). Surveys throughout the state, as well as the review of museum specimens can help confirm the presence or absence of the species throughout its historic range.

What do I do if I think I have found Rusty patched bumble bee?

- Report the suspected find as soon as possible, noting the date, time, exact location, and description of site (For example: Bee was visiting cone flowers in hedge row at 2pm). Document the find with a photo if possible. Do not harm the bee, and as a precaution, you should limit activities like mowing, plowing, or other habitat manipulation in the area until your report can be verified.

Who do I contact for rusty patched bumble bee?

- Robert Anderson, USFWS State College, 814-234-4090 Ext. 7447, robert m anderson@fws.gov

Any new regulations to beekeeping?

- It is unlikely that the USFWS will require permits in PA for keeping honey bees given that *Bombus affinis* is not now considered to exist in PA. If a population is identified, permits may be required when keeping bees near a confirmed rusty patched bumble bee site. Best management practices may be recommended, but specifics regarding bee keeping are still being worked out.

Can regular use of lawn care chemicals, herbicides, and fertilizer continue?

- The use of these products will likely not be prohibited, especially if on private property.

Will there be regulations regarding spraying of crops that might be rusty patched bumble bee forage?

- Spraying of vegetables or flower crops which might be rusty patched bumble bee forage would be addressed through label regulations after discussions with EPA.

What is the habitat of rusty patched bumble bee?

- The USFWS is using the statement: "Bombus affinis typically occurs close to or within woodlands. It has been documented in grasslands, marshes, agricultural landscapes and more recently from residential parks and gardens." as it appears in:

Hatfield, R., Jepsen, S., Thorp, R., Richardson, L., Colla, S., Foltz Jordan, S. & Evans, E. 2015. Bombus affinis. The IUCN Red List of Threatened Species 2015: e.T44937399A46440196.

Are there other insects that look like the patched bumble bee?

- There are many similar looking species, the links below are only a few of them:

Bombus grisecollis - http://bugguide.net/node/view/374380/bgpage
Bombus ternarius - http://bugguide.net/node/view/134883/bgpage
Bombus impatiens - http://bugguide.net/node/view/149711/bgpage

Xylcopa virginica - http://bugguide.net/node/view/1023961/bgpage

Why should people care about the listing of rusty patched bumble bee?

- The United States Congress answered this question in the preamble to the Endangered Species Act of 1973, recognizing that endangered and threatened species of wildlife and plants "are of esthetic, ecological, educational, historical, recreational, and scientific value to the Nation and its people."
- For more information, view the USFWS pamphlet about endangered species https://www.fws.gov/endangered/esa-library/pdf/Why Save Endangered Species Brochure.pdf

What can I (average landowner) do to help?

- Information on how you can help can be found on the following page: https://www.fws.gov/midwest/endangered/insects/rpbb/conservation.html
- If individuals are interested in surveying for *Bombus affinis* or bumblebees in general, please visit this link and select the survey protocol link:

https://www.fws.gov/midwest/endangered/insects/rpbb/guidance.html

- It is an evolving protocol, however at this time, no collecting permit is necessary throughout most of PA to conduct surveys (this zone is known as historic range for survey purposes). The exception is in the 10km radius of any 2000-2006 record – which is considered an uncertain zone for survey purposes. It is recommended that collectors obtain a collecting permit.