

A Guide To: Releasing Flat Bark Beetles for Field Augmentation

Releasing flat bark beetles should not be considered a substitute for field sanitation, strip picking or any of the other CBB IPM recommendations.

The goal is to encourage your beetles to reproduce and significantly increase their population in the large plastic tub provided, then release a portion of the beetles and retain a portion for further rearing.

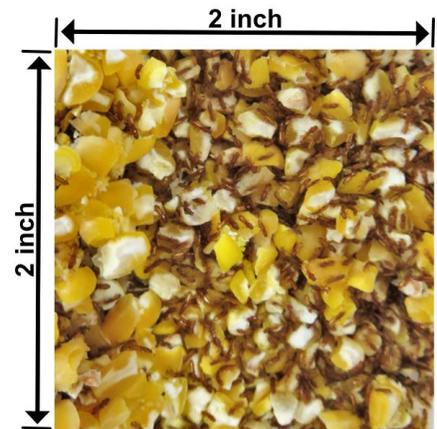
Materials:

- Rearing container with live flat bark beetles
- Spoon or small scoop

WHEN Should I Release My Flat Bark Beetles?

Releases can begin about 3 months after kits are set-up or once you have a flourishing colony (see photo).

The best time for release is during mid to late-harvest and when there are old, shriveling cherries and raisins* (dried coffee cherries) in your field or in trees surrounding your coffee orchard. If you have neighboring feral or unmanaged coffee, releases can happen incrementally throughout the year.



An example of a flourishing colony (photo actual size). This rearing container was setup on 2/7/15 and the photo taken on 5/7/15.

*It is recommended to remove raisins from coffee trees and to kill the CBB within them. Refer to the UH CTahr CBB IPM publication for further instructions on field sanitation (<http://www.ctahr.hawaii.edu/oc/freepubs/pdf/IP-33.pdf>). Avoid releasing your flat bark beetles during the rain - especially to protect the corn in your rearing container from moisture.

WHERE Should I Release My Flat Bark Beetles?

- Release your flat bark beetles in areas of high CBB infestation, or “hotspots”; or
- In several areas around your farm; or
- Near or in neighboring feral or unmanaged coffee trees, while still being lawful and courteous towards private or government property.
- Do not spread your corn and beetles near foraging poultry.

HOW Do I Release My Flat Bark Beetles?

Take your rearing container outside before removing the lid. The beetles will fly when disturbed or encouraged to leave the container and will not stay in the corn long when released. If beetles crawl or fly out of the tub during the release, don’t be alarmed; there will be plenty left for rearing.

- Use a total of $\frac{1}{2}$ to $\frac{2}{3}$ of the corn with beetles from the plastic rearing container when releasing.

- Place a small scoop of the corn and beetles in the crotch (a “v” created by two branches) or stump of coffee trees; or
- Spread the corn and beetles near the base of your coffee trees; or
- Near or on feral or unmanaged coffee trees with raisins.
- Cover the plastic container securely following your flat bark beetle release and save the remaining beetles for further rearing.
- Replenish the 4:1 cracked corn and cornmeal mixture in the rearing container, cover, and return the tub to a warm, dry area. Refer to the rearing information sheet if necessary.
 - For those using 100% cracked corn, preliminary studies are showing that it is better to provide some cornmeal than none at all.
 - Avoid disturbing or shaking your rearing container until it is time to release the beetles again.

Contact:

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Visit <http://hawaiicoffee.weebly.com/predators-of-cbb.html> to learn more about flat bark beetles. A short video on how to release your flat bark beetles will be available soon.

Answers to your questions may also be available by scrolling down the Predators of CBB page and clicking on **Flat Bark Beetle FAQs** (Frequently Asked Questions).

The research currently available indicates that this experimental methodology may help reduce Coffee Berry Borer (CBB) numbers. However, there is too little information available at the present time to offer any guarantee that this will occur under every situation, or that it will contribute to an improvement in coffee production or quality, or that it will have any negative impacts on coffee. These instructions may change as new research information becomes available.

