



## Leafy Spurge Flea Beetle Collection Recommendations

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- WHEN:** Collect bugs only between mid-June and early/mid-July. This is when the adult flea beetles will be out on spurge plants. After mid-July, the flea beetles begin to lay eggs and should not be moved. Eggs need to be laid at the old release site or the new release site.
- Important:** Collect and move your flea beetles when spurge is still abundant: 2 to 5 years after the flea beetles were originally released. Once the flea beetles start to kill the spurge, the flea beetles will also become less abundant. One year after releasing the flea beetles, sweep the spurge patch (during mid-June to mid-July) with a sweep net to verify the flea beetles are there. Also look for scattered dead spurge stems as evidence of flea beetle activity.
- WEATHER:** The most productive collection days are hot, still days. The adult flea beetles will be higher up on spurge plants and easier to collect. When it's cold and/or windy out, flea beetles stay closer to the ground. However, collections can be very successful on moderately breezy days.
- WHERE:** Flea beetles will be most abundant where you find "dead cane" (dead, brittle spurge stems). You may also notice damage to the leaves of live spurge plants. This is evidence that flea beetles are present. However, sweep throughout the release area for hot spots of flea beetles that have moved away from the original release point.
- EQUIPMENT:**
- \* Sweep nets (canvas net with no holes)
  - \* Silk laundry bags or light colored pillowcase (to collect the flea beetles in after sweeping)
  - \* Coolers with BLUE ICE (no freezer ice or ice cubes) and newspaper (which prevents flea beetle containers from getting wet)
  - \* Paper bags or paper containers (to store the flea beetles if necessary)
  - \* Grass clippers and masking tape (2" wide)
- TECHNIQUE:** Sweep back and forth with a pace slow enough to prevent the flea beetles from jumping to the ground before they are collected. Collection should continue until there is a cluster of material the approximate size of a softball in the net.
- TRANSPORTING FLEA BEETLES:**
- \* **Short distances:** If flea beetles will be moved only a short distance, they can be placed directly from the nets into a pillowcase or large, brown paper grocery bag. If the flea beetles will be moved within one hour, the pillowcase/bag can be tied shut and placed in the shade until they are released.
  - \* **Longer distances (over 1 hour):** Place two or three blocks of blue ice into a cooler, then cover with newspaper. This prevents the flea beetles from getting wet. Spread out the flea beetle-filled

pillowcase/bag on top of the newspaper so that the beetles are not piled on top of each other, and leave until released. Paper bags with seams taped shut can also be used.

\* **Paper containers:** If you wish to count your flea beetles, take out plant material and scoop flea beetles with a film canister. There are about 5000 flea beetles per film canister. Two scoops (10,000 flea beetles) may be placed in a paper bag along with a handful of leafy material from spurge plants (not the stems or seedheads) for food. Bags should be taped shut. Flea beetles may be kept this way for up to 7 days in the refrigerator.

\*\* If storing flea beetles in the refrigerator, remove the blue ice (otherwise they will get too cold and die).

**MANAGE and SHARE YOUR FLEA BEETLES!** Be proactive in managing your flea beetles; move them around to new patches of spurge (within 2 to 5 years after original release) and keep your flea beetle populations from dying out. Share your flea beetles with neighbors, relatives, and friends! Good luck!