## Nest plug clues for distinguishing nests of blue orchard bees (BOBs)

The blue orchard bee (BOB), *Osmia lignaria*, is increasingly sought by people who are commercially trapnesting wild bees in the western USA. Dozens of other native bees, including other *Osmia* species, may be inadvertently obtained, particularly if the nest tubes are left out during the summer. Timely pick-up by late spring will avoid many of these unwanted species, especially prevalent summer bees such as *Megachile*.

When recovering blocks/reeds/tubes from the field, initially all one sees are the end caps of the nests, which for some species may be recessed. With practice and a hand lens, the probable identity of the nest can be learned from the nature of the cap itself, or certainly what the occupant is not, based on the material(s) constituting the cap and its surface texture. Most species of cavity-nesting *Osmia* make closures from leaf pulp (mastic), including the earliest spring nester, *Osmia ribifloris*.

It is ultimately important to sort by-catch from BOB, both for quality control and also to avoid shipping other species out of their native ranges. The by-catch should be returned to the wild, but several hundred yards from where nest blocks will be placed the following year.

Below is a visual guide to some of the common or more recognizable nest caps one is likely to encounter when trap-nesting BOBs, particularly in northern Utah.



lumpy mudsmoothed mudleaf pulp, sand grains, leaf discs withinKinds of Nest Plugs Encountered in Trap-nests for Blue Orchard BeesMud, some leaf pieces, orange pollenleaf mastic, orange pollenleaf mastic

