

**North American (North of Mexico) Introduced and Alien Bee Species**  
**Sam Droege\***  
**July 2008**

\* USGS Patuxent Wildlife Research Center, 12100 Beech Forest, Laurel, MD 20708-4083, USA

Information on distributions and status come from the literature, active North American collectors, and online collection data available via the Global Mapper on [www.discoverlife.org](http://www.discoverlife.org), and John Ascher's compilation of distributional data. Thanks for the contributions from Mike Arduser, John Ascher, Rob Jean, Jack Neff, and Robbin Thorp.

**Account Layout: I = purposely introduced, A = accidental introduction or possibly natural colonization (although this would be unlikely for most), Genus, Species, Decade of Establishment, Probable Source Population, Current Status in North America north of Mexico**

**Table of Contents**

Apidae.....	1
Andrenidae.....	2
Colletidae.....	2
Halictidae.....	2
Megachilidae.....	2

**Apidae**

- I**     *Apis mellifera* 1620. Europe, Mediterranean region. Feral colonies present throughout North America. Colony numbers and persistence recently have declined following the introduction of parasitic mites in the 1980s and 1990s.
- I**     *Anthophora plumipes* 1980. Europe and southern China. Introduced at the USDA Beltsville, MD Honey Bee Laboratory. Numbers were initially low, but this species is now found commonly in early spring throughout the Washington D.C. metropolitan area where it nests in the ground under porches or in the dirt of uprooted trees and frequents planted azaleas and other garden flowers. Has the potential to spread throughout North America.
- A**     *Ceratina cobaltina* 1970. Mexico. While it is possible this is simply a disjunct Texas population, specimens for this distinctive Mexican species were only recently discovered in Travis and Hidalgo counties.
- A**     *Ceratina dallatoreana* 1940. Mediterranean region. Central California.
- I**     *Ceratina smaragdula* 1960. Pakistan, India, SE Asia. Introduced into California but not found since its introduction.
- A**     *Centris nitida* 2000. Southwestern U.S., Texas, Mexico, Central America and Northwestern South America. Recently discovered in southern Florida. Not expected to spread outside of Florida.
- A**     *Euglossa viridissima* 2000. Mexico and Central America. Recently discovered in southern Florida. Currently found only on the eastern side of the state. Expected to spread to the western side but not invade much further north.

- A *Xylocopa tabaniformis parkinsoniae* Recent. South Texas. Recently appears to have left its historical haunts along the Rio Grande and now found commonly in urban areas of Central Texas, perhaps translocated there via firewood, but possibly colonized naturally.

## Andrenidae

- A *Andrena wilkella* 1900s. Europe and northern Asia. Common throughout the north central and northeastern U.S. and southern Canada.

## Colletidae

- A *Hylaeus leptcephalus* 1900. Europe. Found throughout the U.S. and southern Canada. Particularly associated with gardens, urban and disturbed sites. Often found on Melilotus.
- A *Hylaeus hyalinatus* 1990. Europe. Currently found in urban areas from New York City and southern Ontario. Has potential to spread throughout North America.
- A *Hylaeus punctatus* 1980. Europe. Currently found in central California, southern South America, New York City, and Washington D.C. Has potential to spread throughout North America

## Halictidae

- A *Lasioglossum eleutherense* 1990. Bahamas and Cuba. Four individuals found in the University of Miami Arboretum. Current status unknown. Not expected to spread out of Florida.
- A *Lasioglossum leucozonium* 1900s. Europe and northern China. Despite its extensive range in Europe and Asia it is limited to the northern areas of central and eastern U.S. and southern Canada.
- A *Halictus tectus* 2000. Southern Europe to Mongolia. Known from 2 sites in downtown Philadelphia, PA and Beltsville, MD. Appears to prefer highly disturbed sites with European weeds.

## Megachilidae

- A *Anthidium manicatum* 1960. Europe, North Africa, Near East, South Central and South Eastern South America. Currently found predominantly in northeastern U.S. and southern Canada, however, individuals have shown up in the central states, Idaho, and on the West Coast where it is well established in California. Likely to spread throughout North America. Associated with large urban and suburban gardens, particularly planted with Stachys.
- A *Anthidium oblongatum* 1990. Europe and the Near East. Currently common in northeastern U.S. and southern Canada and moving into the central states and provinces. Found in most open habitats. Has potential to spread throughout North America.
- A *Chelostoma campanularum* 1960. Europe and the Near East. Found in Upstate New York, Connecticut, and southern Ontario. Has potential to spread throughout North America.
- A *Chelostoma rapunculi* 1960. Europe and the Near East. Found in Upstate New York and southern Ontario. Has potential to spread throughout North America.

- A *Coelioxys coturnix* 2000. Southwestern Europe, North Africa, India. Currently found in the Baltimore-Washington D.C. corridor. Has potential to spread throughout the range of *Megachile rotundata* (its presumed host).
- A *Hoplitis anthocopoides* 1960. Europe. Found from West Virginia to southern Ontario. Potential spread perhaps limited to the range of its reported preferred pollen source, Viper's Bugloss (*Echium vulgare*).
- A *Lithurgus chrysurus* 1970. Europe, Near East, North Africa. Found only in Phillipsburg, New Jersey and Lehigh Gap, Pennsylvania. Until 2007 there were no recent records, but perhaps due to nobody making an effort to look. Apparently oligolectic on Spotted Knapweed (*Centaurea maculosa*) and burrows into wood to make a nest. This species has the potential to be much more destructive than *Xylocopa virginica*. Pilot and scouting surveys to take place in 2008 for additional populations.
- A *Megachile apicalis* 1930. Europe, North Africa, Near and Middle East. Western and eastern U.S. Relatively few records in the East but widespread in California and parts of the Pacific Northwest where it specializes on star-thistle *Centaurea solstitialis*, and is often moved around with *Megachile rotundata* pollinator tubes.
- A *Megachile concinna* 1940. Africa. West Indies, Mexico, throughout the southern U.S.
- A *Megachile lanata* 1700-1800. India and China. Introduced into the West Indies and northern South America where it possibly made its way secondarily to Florida. Found throughout much of Florida but not likely to spread farther unless it is brought to the southwestern deserts.
- A *Megachile rotundata* 1920-1940. Europe to China. Throughout North America to northern Mexico. Available commercially, used in alfalfa seed production.
- A *Megachile sculpturalis* 1990. Far eastern China, Korea, Japan. Eastern and central U.S. and southern Canada. May move throughout the continent as they use widely planted, introduced summer blooming leguminous trees and shrubs.
- A *Osmia caerulescens* 1800s. Europe, North Africa. Near East, India. Northeastern and North Central U.S. and southern Canada. Appears to be less common than it once was, at least towards the south. No recent records for the mid-Atlantic area despite a great deal of collecting, but still common in upstate New York.
- I *Osmia cornifrons* 1960. Eastern China, Korea, and Japan. Introduced to pollinate tree fruit crops. Feral populations established in the Mid-Atlantic and Northeastern U.S. Available commercially.
- I *Osmia cornuta* 1980. Europe, North Africa, Near East. Introduced as a pollinator of tree fruit crops in California, but its establishment has not been documented.
- A *Osmia taurus* 2000. Eastern China, Japan. Mid-Atlantic area and Appalachian Mountains. Males in particular are very similar to *O. cornifrons* and may be confused. Appears to be rapidly spreading and often abundant.