How to Paint:

Anthophora urbana The Urbane Digger Bee

(Tutorial: Skip to page 2)

- Solitary, ground-nesting bee
- Mid-to-late season flight time; these bees are only around in midsummer into early fall.
- Nests in the ground, hence the common name "Urbane Digger Bee"
- As solitary bees do, female Anthophora work their hinnies off. She digs a nest tunnel in the ground (all on her own) where the soil is bare and compacted, where she lays her eggs. Each of the eggs is provisioned with nectar and pollen all collected by mama-bee (all on her own). Each nest cell requires a bee to visit many hundreds of flowers she will be providing a full year's worth of food until the young bee can emerge the next year. When her wings (which, being part of an exoskeleton cannot heal) are too damaged to fly any more, the bee dies of starvation... if she doesn't get eaten or killed by something first. Solitary bees are pretty metal.
- Sharply delineated stripes on the abdominal segments (made by hairs on the back-side margin of the segment)
- Very, very fuzzy on the head and thorax, + first abdominal segment
- 3 Sub-marginal cells in the forewing (for the taxonomically pedantic)

Things to remember in the Painting Process:

- Does the painting look good close up AND far away? Remember that the mural will be first seen at a distance.
- Don't forget to sign your name (subtly) on your painting!

Step 1:







- Transfer your design decide how large you want to paint.
- Choose brushes that will make your life easy, rather than hard. Don't be afraid to use a larger brush to start over painting early in a project is OK!!! Plus you're going to save yourself a boatload of time compared to trying to paint a large area with a small brush.
- Take a long, hard look at your reference images. What kinds of colors are present in the light values? What kinds of colors in the dark values? What features characterize this bee? Look at proportions (head/thorax/abdomen), texture, and color.
- Mix. Your. Colors!!!! Mix a chromatic black to keep the colors more lively and harmonious, and tone colors with their complements. Don't use straight color; it will make your work look flat.
 - Chromatic Black = Ultramarine Blue + Umber

Step 2:



Figure 1 Start playing with texture, light over dark. Use your references often -- the thorax might be hairy, but it is also round, and in some places, the hairs grow out of the body pointed directly at the viewer. in these ares, the viewer can see straight to the exoskeleton... kind of like a part line on your scalp. This Is occurring in this images directly below the nearer wing.

- Block in mid-tones. If you are working fast enough, you can do this in wetinto-wet style, which will allow smoother color transitions, fantastic when describing smoothly rounded shapes.
- Start dropping your more detailed layers of lighter colors over darks

Step 3:



Figure 2 Continue developing textures and highlights. Make smooth edges where they are needed (such as the black and light bands of the abdomen), and keep the edges feathery and layered (the head and thorax both are very hairy...show that this, but keep them "separated" by painting the light hairs over both sections of the body, but leave some dark paint showing through between them). Here you can see that the artist has exaggerated the blue-green of the compound eye to make the color pop.

• Before you are finished, step back from your work and assess if there are enough lights, darks, and mid tones. Is it easy to "read" the shape, color, and texture of the bee from a distance of 6 to 10 feet? Remember that as a mural is unlikely to be viewed from up close.

Step 4:



Figure 3 finished product with background painted in (when this is cut out, some of the background will be needed to keep more delicate parts of the figure from tearing or wrinkling in transit, such as the antennae and wings) Note that the wings are transparent. Pictured here are the tools used in painting with a ruler for scale, and a field guide for an anatomical reference.

Tips for painting transparent wings

- Use opaque paint, with care to show what colors are shining through the wing, with highlights where the wing reflects more light, like cellophane.
- Use a watered-down wash of paint to get a short-cut to a transparent wing.

Reference images below:



Figure 4 wing venation for *Anthophora urbana*. Note that the light-colored bands of the abdominal segments are from hairs, not from the pigmentation of the exoskeleton. Also note that the wings are highly transparent and unlike some other bees, not tinted brown or gray. The light color hairs of the head and the abdomen arise from an exoskeleton that is very dark in color. Using your acrylics to paint light over dark is the best way to handle this.

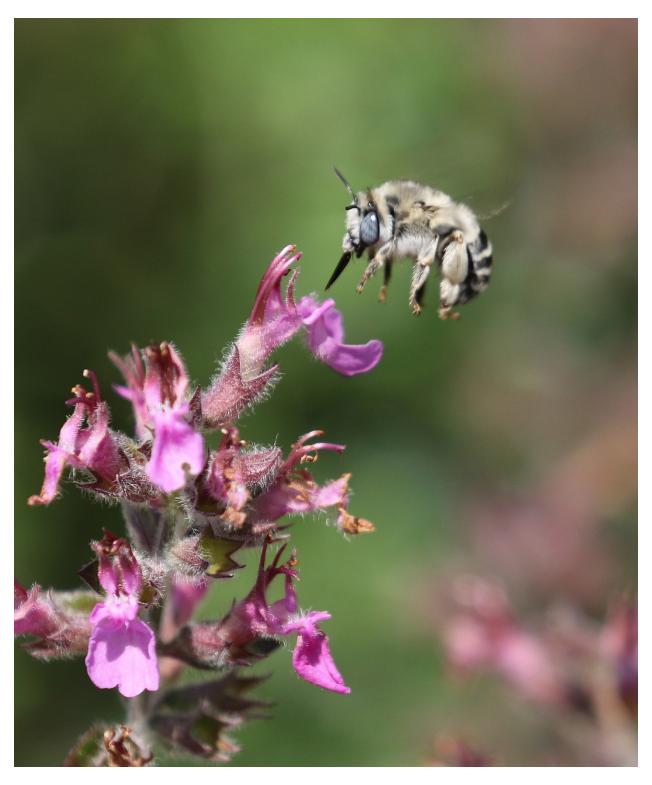


Figure 5 Landing Geat! *Anthophora urbana* – tongue out, pollen-carrying hairs (scope) very much in evidence on the rear set of legs. Note the blue eye color and visual effect on the surface of the eye resulting from the light hitting a compound eye – so cool! That is not an artifact of the photograph or the insect moving – they really look like that.

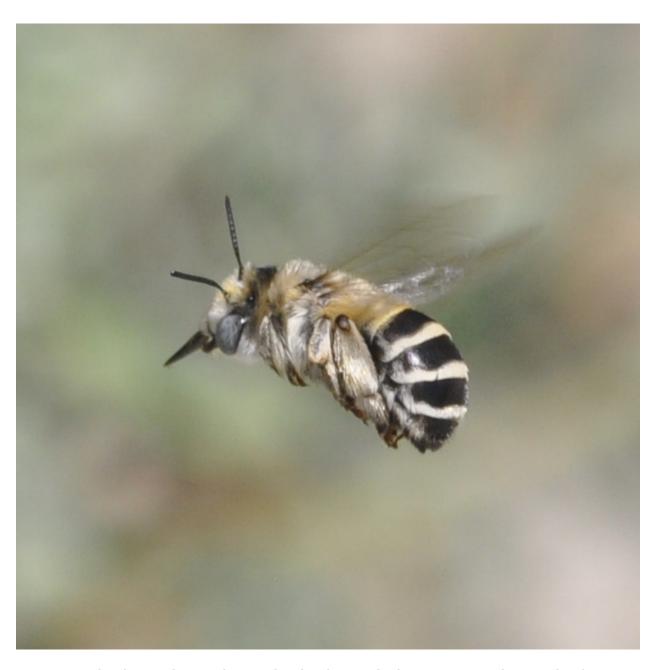


Figure 6 Anthophora urbana...this one has her legs tucked up to protect them and reduce drag in flight. Because her head is slightly rotated in this photo, you can see one of her ocelli (the 3 additional light-sensing eyes on top of her head). Though they are not all visible here, she DOES have 6 abdominal segments, as all female bees do.



Figure 7 Photo from the Beaty Biodiversity Museum at University of British Columbia. Note three sub-marginal cells in the forewing. Additionally, note the 7 abdominal segments that indicate that this bee is a male.

Scientific accuracy is not the point of this exercise. These reference images are meant as a resource if you would like to use them, not as an obligation.

There are over 1000 species of native bees in California. These reference images are merely a starting point – find your own images of native bees, or use these images as a jumping off place for your imagination.