



The Red Velvet Ant (*Dasymutilla occidentalis*), is also known as the cow killer because of its long and potent stinger.

Not actually an ant, Velvet Ants belong to the Mutillidae family. The females are grounded like ants and covered in long hairs, while the males have wings and typically look more like wasps.



Touch The Bug!

Haley Hollinger / haley.hollinger@asu.edu

Collins / Vizproto- ART 494/598 / Digital Culture / Spring 2017

Abstract

The exploration of laser cutting different materials and finding the best way to integrate them into a cohesive piece of art. My work is designed to represent the relationship between nature and man made materials while also making connections between entomology, and tactility.

Research Question

What is the best way to represent insects in art in a way where they are cute and not so scary? How can tactile interaction aid in this pushing this perception?

Precedents and Prior Research

- Looking at contemporary tactile artists like Andrew Meyers and Ann Cunningham, whose priority is to create art than can be viewed and enjoyed both visually and by through touch, therefore including the blind and visually impaired as consumers of their work.
- The benefits of experiencing art through multiple sensory inputs. As well as the reason why, in art and aesthetics, the sense of touch takes a back seat to vision and hearing.
- Technical research on materials and equipment, particularly velvet and laser cutting systems; testing various mediums on rastered velvet, understanding variations in specific laser cutting machines, etc.
- Laser printing with velvet is a relatively untapped artform, and it's something a lot of people tend to get excited over. As a visual and tactile artist, I think the texture and colors of velvet help inform my personal aesthetic.

Process

- I wanted to create a relief piece that would be both visually engaging and tactilely pleasing. I chose to use the Velvet Ant as my subject, as it looks cute and fuzzy, but has one of the most painful stings in the insect kingdom.
- I chose to work with velvets, as the name connects to my subject, and it is an enticingly touchable material.
- My technical process began by tracing out an outline sketch of a velvet ant in Photoshop. While trying to stay as true to the physiology of the Velvet Ant, I made a few small tweaks to make my version cuter (by removing the mandibles and depicting more fluffiness).
- From there I imported my sketches into Illustrator and went through the process of formatting the images for print on a laser cutter.
- I then gathered materials for print: a yard each of red and black velvet, and five 12 in. x 12 in. x .125 in. plywood boards. While velvet is expensive at \$20 a yard, I made sure to buy plenty of extra fabric in case I needed to make multiple prints. (It's better to have leftovers than to run out of material in the middle of a project.)
- For this project I laser cut three different materials. The first was acetate/nylon velvet, the second was plywood, and the third was scrap board kept in the DC lab for student use.
- From there, I stacked and glued my plywood prints to create relief, inlaying the velvet into the spaces between the outline.
- The shadow layer has been washed with a mix of sumi ink and red, water-based ink. The hexagon panels were either left untreated after laser cutting, painted with mixed acrylic paints, or sponge washed with the same ink combination as the shadow.

Results

The result of my work is a relief structure that is both visually catching, and tactilely interesting. Whether or not I have succeeded in creating a more approachable bug is entirely up to viewers.

Conclusion

From this experience, I have learned more about the properties of velvet and how to use it in relation to new materials like wood and paint.

References

- BugGuide.net*. Iowa State University: Department of Entomology, 2003, <http://bugguide.net/node/view/159>. 28 April 2017.
- Frances W. Herring. "Touch: The Neglected Sense." *The Journal of Aesthetics and Art Criticism*, Vol. 7, No. 3, Mar 1049, p199-215.

Acknowledgements

Thanks to all the DC FabLab technicians that made this project possible!

PLEASE TOUCH THE ART.