

01

Vine-Frame Container

Liam Dunaway

Baltimore, MD

Local Invasive Vines, Canvas Textiles.

Vines are some of the most invasive plant species in Baltimore. They pose some of the greatest threat to the city's green spaces by damaging trees and suffocating native undergrowth. Extremely flexible and readily available in a range of diameters, the vines possess promising flexible properties allowing them to conform to complex curves without breaking.

Similar to the frames of specialty hiking backpacks, the vines can be threaded through channels sewn into fabric, acting as a structural agent that holds the fabric under tension. The Vine-Frame container employs this process of channeling through canvas fabric to create a taut, malleable surface with a positive environmental impact from minimal components.

02

Oyster Soap

Cindy Jian

Baltimore, MD

Chesapeake Bay Oysters, Organic Honey and Oatmeal Soap, Natural Glycerin Soap, Cheese Wax

These oyster soaps are made from local discarded shells. Each soap has a unique shape inspired by the different shapes of the found oyster shells. Oyster Soaps are smooth to the touch, the shells are rimmed in natural wax, and are comfortable to hold. The backs of the shells are coated in a thin layer of glycerin soap to bring out shine. The soap also contains finely ground oyster shell particles, which are high in calcium and many amino acids.

These oyster soaps highlight the shell's unique structure and properties. The shape and look of the Charm City Oyster Soap is eye-catching, all-natural, and unique to the Baltimore region.

03

Wax Cloth Hat *Sohroosh Hashemi* Seattle, WA

Hemp Cloth, Beeswax, Cattail, Linen Thread

Combining hemp cloth, beeswax, and cattail—all resources that can be grown in the Pacific Northwest—this weather-proof, insulated hat emerges from a reflection on work wear and hunting gear of the twentieth century, and the more pioneering lives of our great-great-grandfathers and great-great-grandmothers.

04

Circle²

Mier Luo

Baltimore, MD

Bamboo, Waxed Linen Thread

Bamboo is one of the fastest growing plants. Asians have utilized bamboo for centuries because of its high tensile, bending, and straining capacity. It has been used for wall poles, frames, roof construction, and many other objects. By harvesting and utilizing it as a material it will not compete with native vegetation and will not take up space in a landfill.

Circle² is using natural linen thread to join each piece of bamboo together and to transform raw material into bowls, vases, tables, and coasters.

05

Poe Pen

Garrett O'Brochta

Baltimore, MD

Bamboo

Mark making has been apart of our life since we were young. Whether we use pens as adults or markers as children, there are some things that have been used for centuries.

The "Poe Pen" is a mysterious adventure. With the outer shell of bamboo, one might think they are playing with a bunch of bamboo sticks, but look again. Each stick is designed with the familiar Crayola design. The design is laser cut into each bamboo. The "Poe Pen," contains an outer shell and cap made of bamboo.

06

goPack
Cynthia Young
Seattle, WA

*Paper Pulp, Bamboo Culm, Cherry Gum
Natural Plant Dyes*

Paper pulp is an ecological and sustainable choice for frequently used products. The components of the lunch container include two organically-shaped trays joined with a bamboo clip and coated with a mixture of natural plant dyes and cherry gum.

Paper pulp making involves ripping, soaking, and blending the paper into fine fibers. A five-sided box mold is first made to contain the basic shape. A fine wire mesh around the opening of the mold results in a uniquely shaped dome structure. Paper pulp is then freely vacuumed into the mold. The compartments created from this process are let to air dry, and then coated with a layer of cherry gum and natural plant dye. A bamboo culm is worked into a two-pronged clip to clip the two compartments together, creating an easy-to-use lunch container.

07

Pine Resin Casting

Jonathan Lai

Seattle, WA

Pine Rosin, Charcoal

This material exploration began with a search for materials that could emulate synthetic substances such as plastics. Alternative explorations included bees wax based mixtures, as well as a rigid corn starch and hemp burlap fiber glass. However the resin and charcoal mixture was chosen for its contrast to most natural material colors and excellent surface finish.

The process of casting these small dishes involves melting down and mixing a simple combination of pure pine resin and finely crushed charcoal. This melted mixture was then poured into a heated two-piece silicon mold. When removed from the mold, the material has a glossy black color and a very smooth surface. The use of charcoal is key to both coloration as well as providing rigid granular structure within the material.

08

Crab-To-Go *Renee Shen* Baltimore, MD

Bamboo Charcoal, Wood, Canvas

Crab-to-go is a crab takeout container that provides a sustainable solution to enjoy this Baltimore delicacy from local restaurants. Bamboo charcoal is used to absorb polluted air particles from both the environment and the crabs, preventing food from rotting quickly, as well as eliminating the unpleasant smell. The residues of crab shells combined with bamboo charcoal can also mineralize and neutralize soil through a composting process, which benefits your garden and help you appreciate Maryland crabs even more.

09

Reed Chair

Janice Foo

Baltimore, MD

Phragmites, giant reed, wood glue, paperclips, twine.

This product is made out of Phragmites and other reeds that are considered to be an invasive species in Maryland. As a modular project each component comes together to form a whole and each piece is triangular to provide the strongest structural support.

10

Bamboo Water Bottle Cage *Jinpu Chang* Seattle, WA

*Paper Pulp, Bamboo Culm, Cherry Gum
Natural Plant Dyes*

This project began with a intention of using some sort of resin such as pine resin that can be sourced locally and combine with a variety of twig like materials to create structure. In the process of experimentation, it became apparent that pine resin cannot provide the structural integrity required for a water bottle holder since it is too brittle. Bamboo, on the other hand, has sound structural integrity and a circular structure that corresponds to the shape of the bottle. Bamboo became the final choice of material.



Ringed Corner Chair

Taryn Delinsky

Baltimore, MD

Manila Rope, Linen String, Alpaca Wool

This Ringed Corner Chair is constructed of circular sections of manila rope that has been wrapped in linen string. In Maryland's large sailing and fishing industry manila rope has been a standard due to its durability and its resistance to salt water damage. In addition to the manila linen was the primary fiber used in Maryland's colonial textile industry. Additionally sheep's wool is used due to Maryland's unsuitable climate for cotton production. Baltimore county alone is home to six alpaca farms, with many more throughout the state of Maryland.

12

1 Cup & 1 Design : Candle Holder

Kay Heekyung Kim
Seattle, WA

Corn Starch, Baking Soda, Beeswax, Tree Rosin, Charcoal, Vegetable Dye

Milk plastic, unlike regular plastic, does not create as much environmental pollution. It requires any type of milk and vinegar. One cup of milk with one table spoon of vinegar creates the amount of plastic that can fit in one's pal. First, simmer milk on the mid-low setting, and pour in the vinegar as it gets warm. Second, separate the chunks (plastic) from the liquid using cloth. Third, form the chunk plastic into any shape and let it dry for two to three days. Finally, a plastic is created that is purely natural and sustainable, but still aesthetically pleasing.

The idea to make a candle holder sprung from wanting to emphasize the translucent characteristic of milk plastic but also to show that a natural-made product can still be aesthetically pleasing. One cup of milk can create one fine but also sustainable design.

13

Baltimore Pendant Lamps

*Sophie Landry &
Kirsten Gundry*
Baltimore, MD

*Glazed Local Clay, Wire,
Hand-Dyed Bamboo Thread.*

The inspiration behind the pendant light originates from the first gas lamps installed in America by Baltimore Gas and Electric Co. here in Maryland. The lights made from local clay and hand-dyed bamboo thread. The surface is a cut out of the Baltimore's watershed. It creates a duality of material and light that softly projects the map of the water systems onto the surrounding walls.

14

Album Quilt Tote

Hyeji Jun

Baltimore, MD

*Canvas Fabric, Scraps of Fabrics
from Baltimore Thrift Stores.*

Baltimore Album Quilts originated in Baltimore, Maryland in the 1840s and are popular to today. These quilts are made up of squares called blocks with different appliquéd design on each. Baltimore Album Quilt Tote uses canvas fabric and scraps of fabrics from Baltimore thrift stores.

The row houses are typical Baltimore landscape, other squares represent signature mascots of Baltimore, such as Netty BOH and UTZ girl. The bottom right square represents beautiful landmark, Brown Center building of MICA.

15

Convertible Flower Planter *Frances Tung* Seattle, WA

Corn Starch, Baking Soda, Beeswax, Tree Rosin, Charcoal, Vegetable Dye

The initial problem was inspired by unused or broken flower pots. What if they could be re-used for the benefit of the plant instead of tossed away? The container must be sturdy enough to hold a plant during use, be pleasing enough to be displayed in a home, and also be compostable when its life cycle is through.

The first step was to experiment with different clays made from materials sourced from around Washington. The decision to make the flower pot out of baking soda came after discovering that baking soda is commonly used as a soil pH neutralizer and fungicide and found dissolved in natural springs. The inside of the planter is coated in a mixture of beeswax, tree rosin and charcoal, which protects the clay from moist soil. When the planter is to be recycled it can be crushed and the pieces used as fertilizer for the garden.

16

Oyster Gardening Tool

Cindy Jian

Baltimore, MD

*Chesapeake Bay Oyster Shells,
Walnut Wood, Walnut Oil*

These gardening tools will allow you to fertilize the soil as you garden. The shells are brittle and small pieces will fall off when used. Oyster shells are high in nutrients and mineral content. Ground up oyster shells are commonly used in gardening practices to enrich the soil. Using oyster shells local to Baltimore, I have created gardening tools that use the structure and properties of the oyster shell.

The head of the tool is an all-natural oyster shell. The handle is made from local walnut wood. The handle allows for easy movements and does not put a lot of strain on the wrist. In addition, the design of the handle allows for the shell to be removed once used, and a new shell to be inserted.

17

Drift Stool *Theo Pinto* Baltimore, MD

Drift Wood, Newsprint

This stool is constructed of driftwood that has washed up on the shores of the Baltimore Harbor. Inside the hidden compartment is a bottle of Natty Boh (National Bohemian Beer, Baltimore's signature beer). The concept is to represent typical items that drift to the shores of Baltimore, such as drift wood, which are used to make the stool.

18

Umbrella Stand

Amy Westrick

Seattle, WA

*Sawdust, Flour, Water, Sugar,
Vinegar, Beeswax*

The smooth, clean finish of clay made from sawdust is the main inspiration for this design. Previous experimentation involved a variety of other materials with the intent of creating an umbrella stand, including bamboo, cornstarch clay, and handmade felt. Upon discovering the material quality of sawdust clay once it has been dried and sanded, further work went toward experimenting with various grits of sawdust and modifying the recipe to find a clay that would be sturdy enough for my purpose.

Each layer of clay was made using a billiards triangle as a mold, resulting in triangular sheets of about 1 1/4" thickness. The layers are stacked and held together using a flour based glue. Umbrellas are placed in the holes in the top, which have been coated with beeswax to improve water resistance.

19

Hair rollers

Ann Louise Markison

Baltimore, MD

Bamboo

Hair rollers out of bamboo are a tribute to the John Waters' cult-classic film, "Hairspray" which is set in 1960s Baltimore. The beauty industry at large uses disposable non-eco friendly materials. Bamboo, an invasive plant in Baltimore which makes it eco-friendly. Setting hair with rollers as apposed to heated curling irons saves hair from heat damage and also decreases the use of electricity and is a greener way of styling hair.

20

Tree Stump Bowl

John P. McGlew

Baltimore, MD

Reclaimed Wood

These bowls are made using some of the oldest tools known to man, fire and the wedge. The method used to hollow out the found tree trunk is a method of controlled burning that has been used to create dugout canoes since the stone age. This age old method was used on a smaller scale using newer technology such as a blow torch to shape the bowls as well as a chisel to shape what was not burned.

21

Flat Rack
Allie Fauer
Baltimore, MD

Oak Venire, Casein Glue

Flat Rack is a book rack made from oak venires, which has potential to fold flat when not in use. A book rack such as this allows the owner to organize their books on top, while being able to store smaller items such as writing utensils in the compartment underneath the books.

22

The Lola *Hans Harland-Hue* Baltimore, MD

Red Oak

The modern design of the chair appeals to all generations: the classic wooden chair is now made contemporary and put into a modern and minimalistic shape. The chair has the ability to ultimately convert into an end-table upon inversion. Rather than buying two separate pieces of furniture, it cuts cost for materials and it conserves space for the consumer.

The Lola chair was built entirely from red oak, which populates the forests of Maryland and other areas in northeastern America. Instead of using nails and screws, the chair is held together by joints and dowels.

23

Drift Wood Seat
Adam Panasowich
Baltimore, MD

Drift Wood, Wool, Casein Glue

Driftwood is an abundant natural resource and can be found through out the Baltimore wetland. Using drift wood found locally this stool is ergonomic and uses sustainable materials. Additionally the top of the seat is covered in felted wool from local sheep farms. The Drift Wood Seat proving that furniture can be sustainable, sourced within a hundred miles and well designed