HORSES BY
DEBORAH BUTTERFIELD
Working with Sculpture
"In many ways my art is about real horses, and in other ways it's not about them at all."

—Deborah Butterfield

The World of Deborah Butterfield

My goal is to try and communicate with another species; to gain insight by attempting to understand another creature," says contemporary American sculptor Deborah Butterfield. To do that, the artist has spent the last 30 years sculpting one subject—the horse.

Since 1973, Butterfield has made horses out of mud, sticks, barbed wire, metal, and found objects, including a wrecked trailer and the remains of a factory. The artist is not interested in making her horses look real. Referring to her creations as "alter egos"—or other selves—Butterfield often uses the form of the horse as a way of exploring the human experience. Butterfield's horses seem to be at one with nature. They seem to accept the process of living and getting older in the calm, dignified way that animals do.

Deborah Butterfield was born in San Diego in 1949. "Horses are what I am interested in, and have been since I was old enough to think," the artist has said. She bought her first horse and worked and lived on a thoroughbred farm while she was still in school. When it was time for college, she couldn't decide whether to be an artist or a
veterinarian. Knowing she "could never put people's pets to sleep," she studied art, graduating from the University of California at Davis in 1973.

Butterfield began creating life-size, realistic plaster horses while in college. But she wasn't satisfied with these works. She wanted the viewer to "crawl into another creature's shape and to perceive the world in a different way." And she knew she would have to find her own unique method of doing that. In 1976 she moved to Montana and taught art. She bought a ranch and started to make sculptures that would directly link her subject to its environment. *Untitled* (below) is one of a series of horses the artist created using the mud, sticks, and stones found on her ranch.

Around 1980, Butterfield abandoned natural materials and hands-on modeling and began assembling found objects. She collected metal from wrecked cars, construction sites, and industrial salvage yards, cutting, hammering, and welding the pieces together. The flat, simplified, abstracted shapes which make up *Palma* (above) capture the basic characteristics of a particular horse. A bent, blue shape becomes a shoulder, a peeling red metal plate thrusts the animal's "head" forward, the hollow body balances on thin, twisted yellow "legs."


expresses many of the artist's opinions. For centuries, the horse was vital to the development of Western civilization. The only ways to travel were by carriage or horseback. Horses were essential for farming. Because of the automobile and other modern technological advances, horses have now become relatively unimportant. Butterfield's horse sculptures—made out of discarded parts taken from factories, landfills, and demolished buildings—have become monuments to the memory of the horse. They also comment on today's "throw away" society.

*Deborah Butterfield is best known for the horse sculptures she creates from large pieces of metal.*


*Butterfield's early horses, like this one, were created from sticks and mud.*
“Every horse I make is different. It’s like dancing with a new partner.”

—Deborah Butterfield

Ferdinand
This mixed-media sculpture, or assemblage, is made from discarded industrial materials. The form that makes up this animal’s twisting shoulder was once the letter E found in a giant metal sign. The neck is a V, the rump a curving C. The intersecting diagonals formed by the letters suggest the animal’s potential energy. Organic curves work with geometric cubes, convex shapes with concave ones, flat planes with three-dimensional solids. The artist has unified the piece by painting everything red.

Reclining Horse
Butterfield created her early horses out of clay, sticks, and mud. The artist feels that horses traditionally have been associated with the military. To offset the images of stallions ridden by war heroes, many of Butterfield’s horses are female. She feels that mares symbolize the creative, nurturing side of life. The artist modeled the organic, curved shape of this clay horse. She then surrounded it with a fence-like cage of geometric wooden branches.
Deborah Butterfield may sculpt only one subject, but each of her horses is a unique individual. Some are quiet and still; others suggest a range of movement. Some are hollow, some solid; some are open and linear, others densely packed.

**Aluminum Horse #5**
This Aluminum Horse looks like a three-dimensional scribble. Made of steel bits and aluminum wire, the web formed by the thin lines seems to enclose the hollow space inside. The small, angular steel shapes contrast with the continuous curves of the aluminum wire.

**Han Horse**
Han Horse is made up of flat, fragmented plates. Each plate is joined to the next at a slightly different angle and each irregular shape is separated from the next by a thin negative space.

**Rex**
Constructed of orange-colored steel strips, Rex is a portrait of one of the artist’s favorite horses (see photo on page 2). In this work, the negative spaces are just as important as the positive lines. The straight lines and sharp angles that make up this framework as well as its upright, vertical posture give this horse a feeling of dynamic energy.
The Artist at Work

“I never go out and look at my horses while I’m working. I carry them with me in my mind.” —Deborah Butterfield

For nearly 20 years Butterfield has used sticks, logs, and discarded objects to create many of her horses. After she had been working for a while, the artist began wondering what would eventually happen to her sculptures. Some of the materials she was using were so fragile that, with time, many of her pieces would probably fall apart. And the large outdoor public sculptures the artist was hoping to make in the future would never survive unless she found a more permanent medium.

In the early 1990s, Butterfield was able to find the solution to her problem. The sculpture the artist is working on above, seemingly made of delicate pieces of driftwood, looks very fragile. In reality, every “stick” in this horse—which stands over eight feet tall—is made entirely of bronze, a nearly indestructible metal.

Bronze has been used by sculptors for thousands of years because it is easy to work with, has a beautiful surface, and will last for centuries. Bronze cannot be carved or modeled. It is heated to a liquid then cast into shapes by pouring the liquid bronze into a mold.

In creating her horses, Butterfield rarely does preliminary drawings. She makes three-dimensional models instead. To make the models for the works shown on these pages, the artist selected a number of branches and other natural materials. She then built armatures (wire frameworks) to which she attached the pieces of wood. After photographing the finished models from every angle, she then proceeded to take them apart.
What do you think these three "wooden" horses are made of?

Next the artist made molds by covering each separate piece with heat-resistant plaster. All these molds were baked in a special furnace until the wood inside the plaster had completely burned away. Molten bronze was poured into the holes left by the burned wood. When the metal hardened, the plaster was chipped away. The wooden pieces had been recreated in bronze—right down to the wood grain and knotholes and rusty nails.

Once each piece had been cast, the work was assembled.

By using the photos as a guide, the bronze "branches" could be welded together to look just like the wooden model did. Finally, each work was patinated (painted with acids and paints) or hand-painted and burnished (rubbed) to resemble the original weathered wood.

During the past 10 years that she has been working with bronze, Butterfield has designed horses to fit into specific outdoor settings such as sculpture gardens, airports, parks, urban plazas, and civic centers. Like real horses, the sculptures must survive in all kinds of weather and temperatures.

Butterfield's sculptures recognize an animal that has been part of the American myth for centuries. Horses were of prime importance in the Old West—to the cowboy, the rancher, the settler, and the Native American. Today, the horse has been replaced by the automobile. (The tire that forms the horse's rump on pages 8-9 reminds the viewer of that fact). Deborah Butterfield's horses serve as symbols of our changing relationship with our past, and with our environment.
Horses
by Deborah Butterfield

“I want the viewer to actually be able to crawl into this horse shape and inhabit it and to perceive the world in a different way”
Horses, Past and Present

"You know, horses actually changed the history of the world."
—Deborah Butterfield

"ANIMALS. ACTION. THESE TWO WORDS GO HAND IN HAND." —ALEXANDER CALDER

A BIG RED HORSE

does the sculpture (left) made by 20th-century American artist Alexander Calder look at all like a horse? Created from a number of flat pieces of sheet metal and painted red, at first glance the only resemblance this work seems to have to a horse is its enormous size and its title.

Nearly all of Calder's sculptures are abstract; they have been simplified and reduced to a few basic shapes. But Calder's highly stylized works are almost always based on some aspect of nature. Red Horse balances on a number of very thin "legs." These tapered forms have been repeated six times in order to suggest legs in motion. The intersecting planes that make up the horse's "body" emphasize the animal's grace and power. The angular, positive, flat metal shapes in Red Horse seem to slice through the negative spaces that surround them.


GALLOPING HORSES

This small sculpture of a running horse (right) is so contemporary-looking, it might well have been created yesterday. Would it surprise you to find out that this horse was made by an ancient Egyptian artist more than 3,300 years ago?

Horses were used by the Egyptians for transportation and for warfare; images of horses pulling chariots appear in many Egyptian paintings, sculptures, and hieroglyphics (picture writing).

Although now considered a work of art, this horse was originally created for a practical purpose. It was carved from a piece of solid ivory to form the handle of a fly swatter. The shape is stylized, the horse's length exaggerated, the legs and neck extended to emphasize the animal's power and swiftness.

The silhouette has been simplified and the flowing curves highlighted to suggest the horse's most recognizable characteristic—its great speed. The pale ivory has been stained reddish brown and a black mane has been added.
HORSES' SHADOWS
ONLY THE WIND IS HEARD
BLOWING IN THE PINES
JAPANESE HAIKU POEM

GUARDIAN

HORSES

This horse was created about 1,500 years ago to keep watch over the spirit of its dead master. In Japan during the 5th-century A.D., large mound-covered tombs were built for rulers and political leaders. These enormous tombs were surrounded by moats. Rows of clay cylinders were placed at the entrance of the tomb and all around it. Standing on top of each cylinder was a hollow clay sculpture such as this horse (left). These human or animal sculptures, called haniwa, served the departed and guarded his or her tomb. The shapes of the haniwa were simplified and stylized so they could be easily recognized from a great distance. Only the most essential details were included. When an important person died, many of these sculptures had to be created very quickly. The artists may have further simplified their shapes because they sometimes had to create hundreds of haniwa figures before the burial ceremony. After the shapes were modeled, decorative details were incised (scratched) into the surface. A few raised lines stand for reins, two lumps represent a saddle, and three spheres on the horse’s back suggest bells.
Nineteen-year-old Lindsay Huff knows she's a rare breed of artist. She is pursuing metalsmithing at Syracuse University in New York and dreams of making jewelry from her own studio some day. She seldom meets others with a similar life focus. "Working with metal isn't always easy," Lindsay explains. "Metal is stiff and brittle and working small can be difficult. You need to be focused and have a lot of patience."

Lindsay faced a difficult challenge when she created this award-winning zebra. She started it during her sophomore year at Fox Chapel High School in Pittsburgh, Pennsylvania. And it took her two years, working off and on, to complete it. The experience didn't discourage her one bit. Lindsay says, "I love that metalsmithing is one problem-solving challenge after another."

How did you first get involved in art?
I've been drawing since I was a child. My mom didn't go to art school, but she drew a lot. My mom had a horse, so I drew a lot of horses growing up. Today, I have my own horse, and I'm on the equestrian team at my school.

What fascinates you about drawing horses?
I think they're amazing animals. They're so much bigger than you are, and still you can communicate and have a relationship with them. They're huge, powerful animals, yet they're intelligent, gentle, and graceful at the same time.

How did you create this award-winning piece?
I got the idea in jewelry class. I had a vision of this sculpture of a zebra that would have mostly negative interior space. Strips of metal would work off the negative space
and give form to the zebra. I asked my teacher if I could do the piece and he encouraged me to try it.

How did you join the pieces?
The sculpture is actually three separate pieces: the head and shoulder, the back, and the hindquarters. To solder (SOD-der) the pieces together, you have to heat the metal so hot silver will spread across the pieces you are trying to put together and join them. Soldering is not easy.

Why did you make the animal linear, not solid?
A solid sculpture would have been too heavy. Because this piece was a zebra, I wanted to emphasize the stripes. Using negative, or open space was the best way to do that.

How do the positive and negative shapes work?
The strips of metal give the illusion of a positive form when there’s really all this empty space inside. With this piece, I wanted to make people say, “Whoa. What’s going on there?” I wanted them to check and see that the inside is really hollow. I knew the dynamics of positive shapes and negative space could really capture people’s attention.

How did you go about creating this piece?
I started with wax wire. It’s like metal wire only it’s made of wax. I heated it a little, then bent and shaped it. I created each section separately. For the back, I made a dozen different circles of one size and joined them together. I did the same thing with the little circles for the legs, and the rest of the piece. For the head I made a wax wire outline, then put some shorter pieces inside.

Then what did you do?
Once I had my wax model, I cast it in metal. I did three separate castings. To make a mold, I took one section of the zebra’s body and attached it to a rubber base that goes to the bottom of a casting flask. Then I added pieces of wax wire to act as canals for the molten metal. Next, I poured plaster to the top of the flask to make a mold. When that hardened, I put the flask into a kiln and melted out the wax wire. Those areas were now hollow. Finally, I heated the metal, pouring it into the mold so the hollow areas left behind by the wax wire were filled with metal. When the metal was cool, I broke away the plaster and examined it to make sure it came out the way I wanted it to.

What did you do next?
After each section was cast, I washed the metal and filed away the plaster. Once I finished my three metal sections, I filed the areas I wanted to join together to make sure the seam would join cleanly. Then I soldered it and filed away the new seams. Last, I wired the sculpture to its stone base with fishing line and that was it. I was done.

Were you satisfied with your finished sculpture?
Actually, I still don’t feel like it’s finished. I would like to refine it more. It looks too thick in some places and some of the proportions are off. But overall, I was thrilled to see the finished piece. It was the most ambitious piece I had ever tried to create.

What advise could you give to other aspiring artists like yourself?
Find something you are passionate about, and stick with it. Then surround yourself with people who believe in you. If you don’t have people around who believe in what you’re doing, following your passion can be hard. There are plenty of people who say, “Metalsmithing! What are you going to do with that when you graduate?” But I also have people, my parents and friends, who support me. Those are the kind of people I want in my life.

LINDSAY HUFF

“The strips of metal in this work give the illusion of having a positive form when there’s really all this empty space inside. . . . I knew the dynamics of positive shapes and negative space could really capture people’s attention.”
The emphasis on dynamic diagonals gives Charles and Shelly's horse a feeling of energy. The angular silhouette and asymmetrical composition (both sides are different) suggest a young, lively animal. The positive shapes and negative spaces balance each other, giving an impression of grace and motion.

Anah and Patrick's highly simplified silhouette and symmetrical composition (both sides are the same) suggest a reliable, predictable animal. The rectangular body, supported by a series of repeated parallel verticals, gives a feeling of strength. The horse's power is further emphasized by the solid shapes of the shoulders, hips, and head, the three focal points of the piece.

The tangled mass of overlapping branches that make up the sagging body of Charles and Rovas' horse indicates an older, heavier animal. The old horse stands at attention; both head and tail are raised. The rough texture of the long mane and tail highlight the sculpture's two focal points.

**SCHOLASTIC ART WORKSHOP**

**Sculpting a Wooden Horse**

Create an unusual and dynamic animal sculpture.

Deborah Butterfield has said that—in many ways—her horse sculptures are not about horses at all. Her horses can be seen as self-portraits, as statements about the relationship of human beings to their environment, and as social commentaries on today's "throw away" culture.

In this workshop, you'll be creating a sculpture in the form of a horse in order to express something that is important to you.

**MATERIALS**

- Variety of tree, bush, and evergreen branches, pine needles, cones, bark, twigs, etc.
- Florist wire, No. 26 and 28 gauge (7 in. precut and spool)
- Coping saws
- Old scissors (for cutting wire)
- Wire cutters (for cutting tree branches)
- Pliers
- Hot glue gun/hot glue sticks
- Background material on horses

**PREPARATION**

Before doing this assignment, research the history of the domestication of the horse and horses in Asian, African, Native American, and Western art. Bring in materials such as illustrations of various horse breeds, names of the parts of a horse, a horse skeleton diagram, and photos of horses in different positions. Visual references and a basic understanding of horses is essential. This assignment cannot be done from memory or imagination.

Prepare this project by building an armature—or framework—for your horse sculpture.
Andrew and Susan’s horse looks as though it might need a good meal. The piece’s main focal point is its solid, angular head, which pushes forward in search of food. Both sets of legs balance each other as they prop up the horse’s thin body. The tail droops down and spindly repeated lines have been joined to form the convex rib cage.

The straight, stiff legs and the scale of the enormous head in Jenna and Jett’s sculpture give the impression of a very young horse. The animal’s posture is unsteady. It’s huge, distorted head pulling the small body forward may identify this as a foal that has just been born. The soft texture that covers the young horse like a baby’s skin is in reality fuzzy green moss.

You will need to work with a partner to construct your horse. Use a glue gun and wire to join the pieces of wood to each other. Every element should add to the personality you wish your horse to project.

Determine breed, position (standing, head up or down, laying down, turning), and materials. Discuss safe use of hot glue gun, wire cutters, and coping saw. Wear gloves before assembling materials. Referring to horse anatomy, begin building a skeletal framework (armature) for your horse using wire to hold pieces together. Use hot glue when necessary or to hold pieces temporarily until they are wired.

**Step 1**
Two weeks before the assignment, bring in tree materials, bundled and tied. Always ask permission before cutting anything. Limit length to 3 feet or less. Look for branches with interesting surfaces or color such as lichens, fungus, moss. Get a variety of material—thick, thin, dried (brittle), fresh cut (bendable), light, dense, rough, smooth textures. Select branches with expressive organic shapes. Store branches in boxes or plastic containers and label each.

**Step 2**
For this assignment, you will need to work with a partner. Limit your sculpture’s size to 24 inches high x 36 wide x 12 deep, or work smaller; 6 inches high x 12 wide x 4 deep.

**Step 3**
The shape of your horse should be as simple as possible. Your sculpture’s silhouette should express the animal’s character. You can use large, more complex shapes as focal points. View your horse from all angles and sides during construction. Contrast shapes, sizes, colors, and textures. Your sculpture should be a highly stylized three-dimensional “line drawing” of a horse.

Keep your horse as simple as possible. However, you may wish to make the focal point—head, mane, eyes—more detailed and complex to draw viewers’ attention.
Horse of a Different Color

How has Deborah Butterfield been able to sculpt one subject for years?

During her long career, Deborah Butterfield has sculpted only one thing—horses. The artist’s subject may not have changed, but over time, her materials, methods, and approaches have altered dramatically.

Below are details of some of the works featured in this issue and a list of sculptural terms, techniques, and names. Next to each of these words, write the letter of the visual (or visuals) that seems most appropriate.

1. Assemblage
2. Bronze
3. Ferdinand
4. Convex shape
5. Diagonals
6. Alter ego
7. Organic curves
8. Discarded metal
9. Intersecting diagonals
10. Modeled clay
11. Concave shape
12. Palma
13. Aluminum wire
14. Mare
15. Negative space
16. A flat, abstracted shape
17. Patina
18. Rex
19. Sharp angles
20. Cast
21. DB 10-78-V