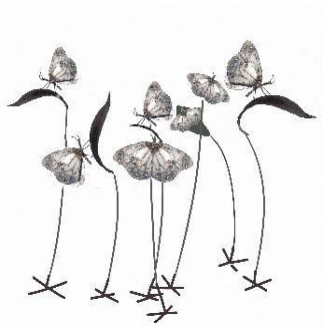


Butterfly Group Method

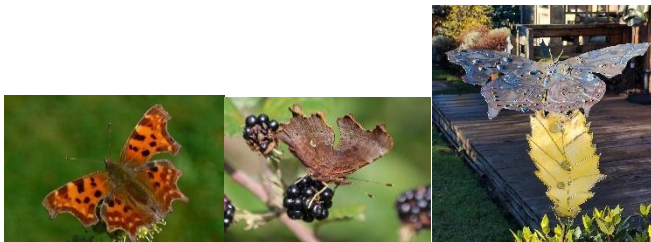
This is a guide to the method I evolved in making butterfly sculptures. The aim is to represent butterflies using only sculptural marks and shapes. I have added some linseed oil diluted artist's oil paint to some to hint at colour and to change the way they rust.



Ringlet



Comma



Skipper



I started with the Ringlet, which has more distinctive markings on **the underside of the wings** and a shorter body. Mark the drawing you do on the metal as underside to remind yourself.

I added the Comma for the larger group I made. Its body is longer and fatter but this can be achieved with welds. The markings are on the **top side of the wings**.

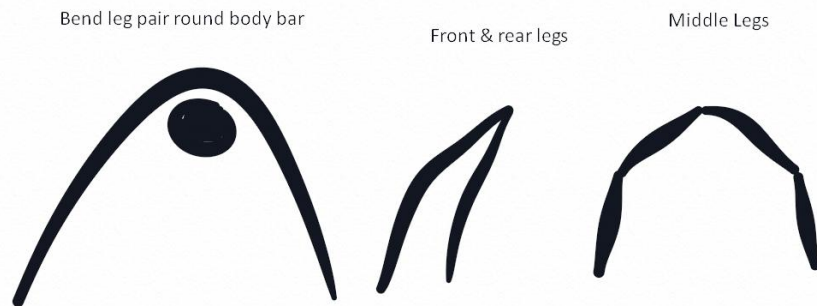
I am about to add a small skipper for another group sculpture. This is most significant for wing shape. It also has all six legs on show.

If you don't want to go into complex painting choose butterflies that have distinctive wing shapes and markings that you can produce with the metal working tools.

I used two simple leaf shapes; long smooth and fatter nettle.

Assembly

Cut and bend a body, 2 or 3 pairs of legs, each pair one continuous rod bent in the middle. Leg bar 16cm for larger butterfly, 12-14 for smaller. Bend the legs at the 'knee' so that they turn down to the ground. For four legs the bend turns down away from the plane of the middle bend. An extra middle pair has the turn in line with the plane.



The 1 pair of antennae from one rod. Antennae can vary by butterfly. Ringlet bent down, comma bent in, skipper straight with weld on the end.

Put the tail end of the body in the vice so that what would be the thorax is protruding and sloping upwards. Put the back legs over the thorax area, so that they are pointing back relative to the line of the body. Spot weld. Put the front leg pair over the body a couple of mm forward and spot weld with the legs pointing forward. Run weld over the legs to form a platform for the wings. Extra legs between the two if there are any. An alternative is to attach the wings under the body and the legs to the wings (skipper perhaps).

Spot weld the 'nose' of the body to round off and spot weld either side to make eyes. Attach the antennae pair to the top of this head. On

other insects I have sometimes attached a proboscis with a curled sliver of thin metal sheet.

Mark wings out in pairs, so a front pair is one piece etc. Draw the marking and the veins of the wings. I use a plasma cutter like a pencil, skimming it over to make marks rather than cuts. It takes some practice to get the light touch, especially for the veins. Spot weld any circular markings. Cut 1 front and rear pair for each butterfly variety. Remember all welds/markings on the comma are on the top because the under wings are plain and meant to disguise it as a set of dead leaves. There will be an effect on the underside from the marking but it will be less defined.

Although the most significant markings on the ringlet are the spots on the underside, you might like to emphasise some marks on the other side or add dots.

Make sure to lay your wing pairs out with the top side upwards. Depending on the intended final wing position, it will probably be best to carefully bend each pair of wings before welding them together, or start the bend and finish after spot welding. Lay the front pair of wings on top of the rear and spot weld at the rear of the front wings. Turn over and spot weld at the front of the rear wing pair. Turn over again and weld across the whole top join to hint at a body. The comma body is slightly wider and 'fluffy'. Gently test bending each wing slightly up, if some more bending is required. With a closed wing comma gently turning out the tips of the wings adds a nice touch.

Lay the wing set onto the body in the vice and spot weld then run a weld down each side of the body to fully attach to the wings. You should now have an assembled butterfly that should stand. Adjust leg position/length to ensure this. At this point add any further visual adjustments, like texture on the body and rounding off the tail end with

the welder. This is the best point to add a small end knobble to the antennae if required.

I have put a range of sculptures on obelisks but the last set of butterflies have just been on straight rods. These just stick straight into the ground and can be pushed through plants.

Make a bent top rod or bend the top of the upright. The aim is that the weight of the whole is evenly balanced over the upright. If using a stand (see below) check in the stand and adjust the hole/rod ends so that it works smoothly. Attach a leaf to the top of the top rod or upright assembly with enough leaf end protruding to make a gentle bend up or down as a finishing touch. It may be easiest to put the upright in the vice to weld the butterfly onto the wing. Adjust the legs so that the butterfly stands true on the leaf and spot weld each leg. Add extra to ensure a firm attachment. Test and fine tune the whole for balance and look.

Butterflies can also be on a rod without a leaf, perhaps with straight rods/slim leaf (as grass) or spot weld a berry. Most on a bent rod with leaf and in different positions or facing in different directions.

Optional Stand

For display in an exhibition you can use a stand. This design allow the upright rod to go through the stand into the ground, so that it adds extra stability in a windy location.

