

FOCUS ON CONSERVATION

Cementing the Future



Repairing the concrete sculptures at the Charles Macdonald Concrete House Museum



Above: The Charles Macdonald Concrete House Museum at 19 Saxon Street, Centreville, Kings County, Nova Scotia.

Left: Woman washing her hair. This was Charlie's favourite, and most controversial, sculpture.

CHRIS REARDON PHOTO

Charles Macdonald created sculptures from reinforced concrete, his medium of choice, for display at his home and his cottages. For his larger statues, Macdonald would begin by fashioning a metal substructure from iron rods, tin cans, window screening, chicken wire, and the like. Onto this "skeleton" the sculptor patiently applied layers of concrete by hand until he had created the desired form. Describing his technique, he said that "you pile cement on, you take a little off, and by and by you've got something."

In spite of the ravages of time, weather, and vandalism, many sculptures still grace the lawn of the Charles Macdonald Concrete House in Centreville. Statues at Macdonald House include four life-size deer, a young woman washing her hair, a mountain lion, and a number of mushrooms.

The collection of statues was the focus of a conservation project in 2001/2002 directed by conservator Paula E. French.

The project had five steps: up-righting leaning statues, cleansing them of dirt and old paint, scraping corrosion from exposed metal, patching up damaged concrete, and applying a surface coat of paint to the repaired statues. After this finish colour coat is applied and regularly maintained

Gravel is more stable than soil and more conducive to water drainage, so it was used to level the ground beneath leaning statuary.

Next came the cleaning of the statues, accomplished with water, paint strippers, brushes, metal scrapers and dental picks.

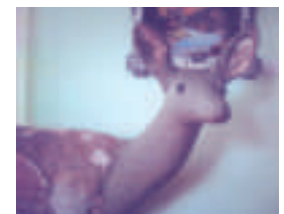
Often concrete had worn away over the years, exposing the metal substructure. Where this had happened, the substructure itself had corroded and needed cleaning before it could support new concrete. To clean the exposed metal, conservators used metal scrapers as well as brushes with brass and nylon bristles.

Conserving as much of the original material as possible is important, but often new concrete had to be applied where the old had fallen away. French used concrete patches to create a texture and consistency similar to Macdonald's own concrete. First she applied the new concrete with trowels and spatulas. Then the concrete fill was "manually manipulated to mimic the texture of the original material." Moistened towels and plastic bags made "casts" for the mended appendages, to keep the patches from drying too quickly and cracking.

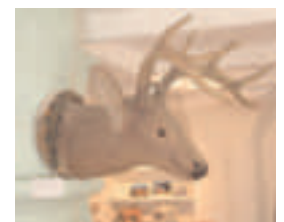
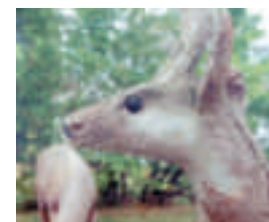
Concrete must be protected at all times to prevent damage from water absorption. "A paint and primer combination is a suitable and affordable solution" says French. A primer coat was applied to the newly mended statues by the conservation team. The last step is to regularly re-paint the sculptures as Macdonald had them originally, preserving his works for the people of Nova Scotia.



Top: Paula French and Robin Bates scraping paint from the concrete mountain lion. Bottom left: Kevin West and Robin Bates laying gravel beneath deer to stabilize and level. Bottom right: Stabilizing mountain lion. Standing L-R: Robin Bates, Jerry Cudmore, Kevin West. Kneeling: Paula French.



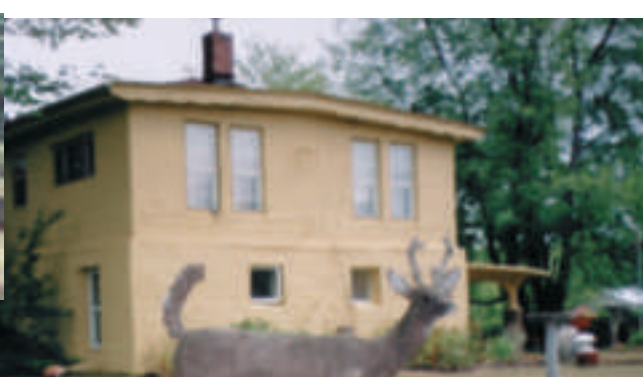
The Spencer deer, before (L) and after (R) conservation treatment.



Deer with new concrete patch (L). Concrete trophy buck after conservation treatment (R).



Above: Robin Bates applies the finish coat to the Mountain Lion. Left: Julie Gardiner repainting Woman Washing her Hair after repair and priming are completed.



Two deer on the lawn of Macdonald House, one before (R) and one after (L) its conservation treatment. Top inset photo shows the doe's new concrete patches curing. Bottom right inset: Julie and Robin paint final coat on deer.

