

## JOHN BLADEN BENTLEY Colour Carbon Print Process

John Bladen Bentley makes and exhibits his photographs as colour carbon transfer prints – the most rare and beautiful print process in photographic history. After almost two decades of research and development, he has perfected this ultra-labourious colour separation and assembly process. The print is made up of pigment saturated gelatin relief layers in exact registration printed on 300-lb fine art paper. Using modern pigments developed for the auto paint industry, chosen for permanence and colour fidelity, the prints will retain their original colour and saturation for many centuries. There are less than a handful, world-wide, making these prints. Currently, Bentley is the only one in Canada.

To put his work in context, in 1855 Alphonse Louis Poitevin, a French chemist and photographer, succeeded in making a new, and permanent, photographic printmaking process. Poitevin took carbon black soot from the chimney and mixed it into an emulsion of gelatin and dichromate. After exposure to light through the negative, the pigmented gelatin was washed in a warm water bath. There, unexposed gelatin areas dissolved and washed away, and a gelatin relief image formed of inert and permanent carbon pigment. This was the very first permanent monochrome photographic print process.

A few years later in 1869, French physicist Louis Ducos du Hauron made the very first colour photograph using the carbon process. Three separate emulsions of blue, red and yellow pigments were mounted on to the same paper support, in careful registration, to make the first full colour photographic print.

Bentley continues his work in this tradition.

While prized for their beauty, carbon prints are difficult, and expensive, to make. Colour carbon printing had virtually lain in the dustbin of photographic history a handful of printmakers and photographers world-wide, have been working to resurrect it.

It is the most complex and complicated photographic process. All printmaking conditions must be controlled – room temperature, humidity, water temperatures, timing – and it involves a myriad of painstaking steps. The process works on the edge of failure.