



Handbag made from sturgeon leather showing the "scutes" that are unique to sturgeon leathers. ALL CREDITS: ATELIER ANATOL

Caviar and exotic sturgeon leather

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The sturgeon is one of the most ancient and valuable fish in the world. They live exclusively in the northern hemisphere, North America, Europe and Asia and belong to one of the oldest families of bony fishes. Sturgeons are diadromous fish that spend most of their lives in the sea and migrate to fresh water to breed. The first fossil records date back to 65 million years ago¹. There are over 20 sturgeon species that are known (Acipenseriformes) that encompass two families: Acipenseridae (sturgeons) and Polyodontidae (paddlefish).

The main processed product from the sturgeon fishery is the unfertilised sturgeon roe, caviar, a gourmet delicacy². Customarily the term caviar refers to the roe of wild sturgeon from the Caspian and Black Seas³. Beluga caviar is the most expensive type of caviar, with present market prices ranging around \$10,000 per 1kg⁴. According to the United Nations' Food and Agriculture Organization, roe from any fish other than Acipenseriformes is not caviar, and is often classified as "caviar substitute".

In addition to the caviar, the other processed product is its meat, which is sold smoked, frozen or marinated. The bones are used as an aromatic substance for cooking. The skin is left for disposal, fish meal or leather. Only very few companies have started producing and marketing handicraft made of sturgeon leather. It is a 'sleeping' market in the hands of a small and enthusiastic group of artists and craftsmen.

Nonetheless, the Caspian and Black Sea had not always been the only source of sturgeon. Until the 19th century sturgeon

trading centres spread across all cities which were on one of the great European rivers. In Vienna and Hamburg sturgeon were considered mass food for the common people who were not allowed by law to eat more than three sturgeons in a week⁵. Tons of the fish were caught and partially fed to dogs and cats. Ignorance, accompanied by political incompetence - and not realising all the signs of overfishing, poaching, water pollution and damming of rivers - have decimated the sturgeon almost completely. Currently we can only find a limited stock in the watershed Gironde-Garonne-Dordogne, France⁶. In the United Kingdom, the sturgeon is a royal fish and every sturgeon caught is the property of the Crown as part of his or her royal prerogative⁷.

Times have changed, and the past decade has seen the rapid development of farmed fish - especially the most valuable fish. The sturgeon is now becoming increasingly important, which is good for the wild sturgeons' comeback, the consumers' environmental concern and for the farmers' efforts.

Last but not least the skin is left to produce one of the most



Nut table top inset and distinctive belt with Sturgeon leather.

exotic leather types. However, far too little attention has been paid to use the potential of this new raw material source for tanneries. The most farmed fish such as carp and salmon are smaller than the sturgeon, that reaches in a normal case a length of 80 to 140 centimetres and a weight of about 65 kilograms. The leather pieces of the emerging sturgeon are greater and thicker than these species which makes the production of larger fashion articles much easier.

Many have tried to make fish skins into leather, but few have succeeded. Every fish species needs a single, highly specialised production process. The cleaning of the skin is very important for tanning. One of many mysteries is in the combination of chemicals that are used to remove all the fish oils so that there is no odour.

Working in the beamhouse requires extreme caution. One of the reasons is because the fish skin is much more sensitive than those of mammals. It shrinks at a lower temperature, is very weak to acids, alkalis, enzymes and hydrotropism substances, and the putrefactive processes start earlier.

Timing and temperature is critical in the chemical soaking stage. If soaked too long, it will lose its strength and eventually fall apart. Tanning, re-tanning and fatliquoring determine the strength and softness of the leather. Generally speaking for all types of strength test sturgeon leather scores at least as highly as bovine leather and, with good tanning, it scores significantly higher. Finally, dyeing and finishing is subject to fashion preferences but should not reduce the special character of sturgeon leather.

Fish have scales, and removing these scales as part of the leather making process requires time and investment. There are also five longitudinal rows of bone shields, one in the back, two at the side and two at the stomach. These bony plates are often called scutes rather than scales. These must not be removed as it provides a more exotic look to the leather. These bone scutes authenticate the typically exotic sturgeon look, mostly presented in handicrafts as a single or double line having different patterns.

Unlike wild caught fish, fish farming is an excellent alternative to produce exotic leather. Usually, fish skin is a waste and must be mostly disposed, but for leather production farming guarantees a regular access of skin with consistent quality. Nobody should have a bad conscience when buying farmed fish leather products - on the contrary. No fish is caught, bred or slaughtered specifically for its skin.

The aquaculture production of sturgeon and the long-term uptrend in demand for the valuable sturgeon leather type present new opportunities. Designers and producers are offered an exceptional opportunity to work with exotic leather with new innovative ideas that are springing up.

The similarity with reptile leather is obvious. The trend goes from more rustic and enduring leather articles to the more elegant

and fashion-driven accessories and home decoration of superior quality. Sturgeon leather is exotic, durable, and magnificent. It is used for clothing, shoes, wallets, belts, purses, watch straps, briefcases, handbags and tables with inserted leather pieces as well as all types of art and fashion accessories. ☺



Craftsman Atelier Anatol within his workshop.

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