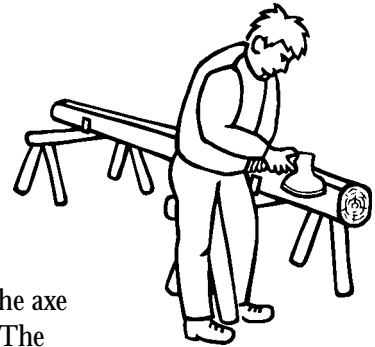


# Swedish Broad Axes and log-building tools

from Gränsfors Bruks 2003



Logbuilder's tools have developed over a period of many thousands of years. Tradition, climate and the type of timber have caused these tools to vary from country to country. In Sweden the tool catalogs of the 1900s depicted, for example, the Dala model axe, the Småland model, the Piteå Carving model, the Helsingland Axe, the Norrland model, etc. Some axes exported were the Australian Broad Axe, the Pittsburgh Broad Axe and the Russian models (Siberian, Petrograde and Archangel). The axes, generally speaking, were available in four to five different edge-widths (which we now call edge-length) and were always sold without a handle. The axes were the logbuilders most important tools but he also had many other tools, like the draw-knife, log dog, auger, log scribe and measuring tools. All Gränsfors Bruks Broad Axes and log-building tools

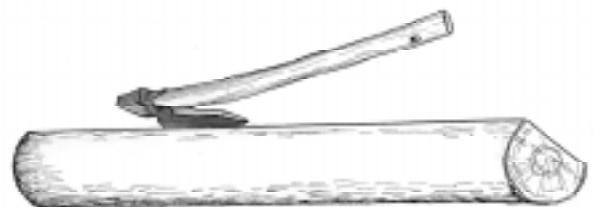
are handforged at the axe factory in Sweden. The patterns of the Broad Axes and the handles are based on Swedish logging techniques for squaring logs and structural timbers of all kinds. The Broad Axes come with a high quality hickory handle slightly curved upwards and a grain leather cover. Gränsfors Bruks Broad Axes have a 20 year guarantee and are stamped with the smith's initials.

**If you have questions or comments you are always welcome to call, write or visit us at Gränsfors Bruks.**

## Broad Axes

In logbuilding, two different types of broad axes are often used: Chopping Broad Axes with straight (in relation to the blade) handles with the edge sharpened on both sides or Carving Broad Axes often with an angled (right or left) handle in relation to the edge and often with the edge sharpened on only one side.

But a Broad Axe can also be a chopping and a carving axe at the same time! The handle is angled to prevent injury to your hands when working close to the material.



When describing a Broad Axe the model, (design), angle of the handle and the sharpening of the edge are used. Furthermore, the edge-length, weight (indicates weight including handle), how the handle is attached

and the length of the handle are characteristics which set the broad axes apart.

Today Gränsfors Bruks manufactures three models of broad axes: the 1700, 1800 and 1900.

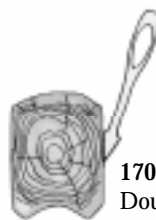
## Gränsfors Bruks Broad Axes 1700 Model and 1800 Model



**1700 Model**  
Edge length: 7 1/2"  
Handle length: 20"  
Weight with handle:  
3 3/4 lb.



**1800 Model**  
Edge length: 7 1/2"  
Handle length: 20"  
Weight with handle:  
4 lb.



**1700 Model and 1800 Model**  
Double-sided sharpened for many different types of scoring, hewing, carving, etc.

The edge on a Broad Axe can be sharpened in many different ways. Gränsfors 1700 and 1800 model logbuilding Broad Axes have a very thick edge that is always sharpened flat on both sides. One can say that the edge is "Double-Sided Sharpened". With the 1700 and 1800 models the handle is always attached straight in relation to the blade. The thick cutting-edge and

wide bevel enable the head and handle of the axe to stand away from the material you are working on. Your hands, grasping the handle, will therefore automatically be at a distance from the piece you are working on. (It is for this reason the 1700 and 1800 models are not available with angled-handles.)

## Gränsfors Bruks Broad Axe 1900 Model

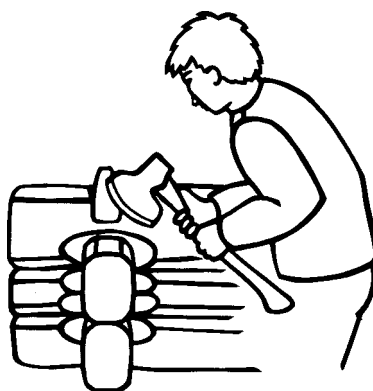


**1900 Model**  
Handle length: 20"  
Edge length: 7"  
Weight with handle: 3 1/2 lb.

On special order the broad axes Model 1800 and Model 1900 can have a 25" curved hickory handle.

Gränsfors 1900 Model Broad Axe can be delivered sharpened either on both sides "Double-Sided Sharpened" or only on one side "Single-Sided Sharpened Edge", (scissors-sharpened).

As a rule of thumb, if nothing else is specified, the 1900 model Gränsfors Broad Axe you purchase will have a double-sided sharpened edge. The double-sided sharpened Broad Axe (Chopping Broad Axe) is used for corner chopping and also for all types of hewing of logs. The handle is by default "straight".



The 1900 Model Broad Axe with a single-sided sharpened edge often has "Reverse Scissors Sharpening". This is one type of carving broad axe which works well for the planing of flat surfaces. This type of broad axe is also easy to use in corners (often sharpened on the left side with right angled handle.)

The 1900 Model Broad Axe with single-sided sharpened edge can also have so called "Standard Scissors Sharpening" on the right or left side. With this type of sharpening the side of the broad axe which is not sharpened is usually completely flat. Broad axes with standard scissors sharpening are used for length-wise squaring of logs. (Often right-side sharpened with a right-angled handle.)

Gränsfors Bruks Broad Axes 1900 Model are available with different sharpenings.

The illustrations below show the Broad Axe's head from the user's side (handle end.)



**1900 Model**  
(Most Common)  
Double-sided Sharpening  
for all types of hewing  
of timber and corner chopping  
“Chopping Broad Axe”



**1900 Model**  
Reverse Scissors Sharpening.  
For squaring of logs or for the  
planing of log walls.  
“Carving Broad Axe”



**1900 Model**  
Standard Scissors Sharpening.  
For planing of log walls or for  
squaring of logs.  
“Planing Broad Axe”

On the 1900 Model Broad Axe the handle can be straight, “right-angled” (angled to the right) or “left-angled” (angled to the left.)

With angled handles the handle and your hands remain at a distance from the timber, thereby minimizing the risk of personal injury. Before it was the user himself who made a curved

handle in either direction. Now we bend the poll and the eye 10° to the left or right.

When the 1900 Model Broad Axe is used as a carving axe, it often has an angled handle. When the 1900 Model is used as a chopping broad axe the handle is usually straight.



Left-Angled



Straight



Right-Angled

*“What works for Mr. Anderson may not work for Mr. Petterson.”*

## Other tools for logbuilding

Long ago it was the village smith who manufactured tools on the spot based on the order from the logbuilder. Regional variations of tools can be large.

**Take care of antique logbuilding tools, they are pieces of our cultural inheritance!**



**Traditional Scandinavian Forest Axe**  
Edge length: 3 1/2"  
Handle length: 25"  
Weight with handle: 2 1/2 lb.



**Carpenter's Axe**  
Edge length: 3 1/2"  
Handle length: 18"  
Weight with handle: 2 lb.



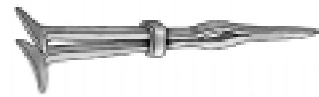
**Mortise Axe**  
Log House Corner Axe  
Edge length: 2 1/4"  
Handle length: 20"  
Weight with handle: 2 1/2 lb.



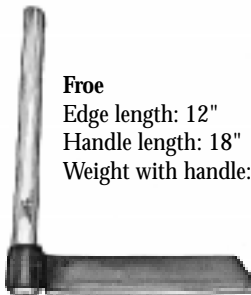
**Swedish Drawknife**  
Total length: 22 1/2"  
Blade length: 11 1/2"  
Blade width: 1 1/2"  
Weight: 1 1/3 lb.



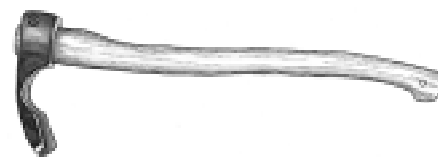
**Log Dog**  
With hardened points  
Total length: 19 1/2"  
Weight: 1 1/2 lb.



**Traditional Log Scribe**  
(Compass model)  
Opens 8 inches.  
Weight: 1 3/4 lb.



**Froe**  
Edge length: 12"  
Handle length: 18"  
Weight with handle: 2 1/2 lb



**Gutter Adze or Straight Adze**  
Edge length: 3"  
Handle length: 25"  
Weight with handle: 2 1/2 lb



In Sweden, we normally use hewn logs in log homes. We can recommend a book about Swedish log-building written by Sven-Gunnar Håkansson "From Log to Log-House".

On Gränsfors Bruks website [www.gransfors.com](http://www.gransfors.com), we have an "Axe Bibliography". If you have books about axes and log-building you can recommend, please let us know, and we will add them to the "Axe

Bibliography".

The American Log Builders Association and Canadian Log Builders Association are craft associations for log builders. They publish "Log Building News", arrange conferences, etc.

In Sweden we have Föreningen Svenska Timmerhus.

The address is:

Box 231, 795 23 Rättvik, Sweden.



**GRÄNSFORS BRUKS INC**

Sweden: Gränsfors Bruks AB, 820 70 Bergsjö. Phone +46 652 71090. [axes@gransfors.com](mailto:axes@gransfors.com) [www.gransfors.com](http://www.gransfors.com)

USA: Gränsfors Bruks Inc, Box 818, Summerville, SC 29484. Phone 843-875-0240. [info@gransfors.com](mailto:info@gransfors.com)

Canada: Gränsfors Bruks Inc, 940 Sheldon Court, Burlington, ON L7L 5K6. Phone 905-681-3993. [canada@gransfors.com](mailto:canada@gransfors.com)