

WHAT THEY DIDN'T KNOW AT THE FIRST ALTHING

By Alfred Gruber



Figure 1.

It isn't difficult to picture the scene at that first Althing. The quick-tempered Vikings gathering only because someone had the foresight to declare the Althing Plain a neutral area — revenges prohibited. The geologic feature of the basalt cliff echoing the speaker's voice almost supernaturally out to the assembled (Fig. 1). Here and there were probably bits of wood or dung for cooking fires and water in the lake for chasers. Who could ask for anything more?

What the chieftains couldn't know at that first Althing, which laid the groundwork for Iceland's national parliament and a general system of law for the entire country, was what was going on beneath their feet. They were astride the Atlantic Ridge at one of the few places where it rises out of the sea and traverses Iceland from north to south. Here the North Atlantic tectonic plate and the Eurasian plate pull away from each other. Those on the western side of the fault are indeed technically on North America. Yes, there were Vikings in North America even before they settled over in Greenland.

The plates are slowly moving from each other. That's "slow" as on the geologic clock. One saga tells the legend of Flosi, trapped by enemies. The only escape route was a superhuman leap across one of the flooded chasms at the plains' eastern end. He made the jump and his pursuers decided they couldn't. Flosi escaped. He was in the right geologic place at the right geologic time. If this had happened a couple of hundred years earlier, they all could have jumped easily and Flosi would not have leapt into immortality. Today, not even the best Olympic jumpers could make it.



Figure 2

Plate movements, magma, glaciers, and volcanoes have created in the center a wonderful lake called Thingvallavatn, or Thingvalla Lake (Fig. 2). The lake is a miracle. Glacier melt water is always milky from rock the ice is grinding as it scrapes along. The milky glacial water submerges into subterranean springs where the solids are 90 percent filtered out and super clear water flows into the lake. Depths reach 375 feet and light extends down to 260 feet. It should be pointed out that the usual milky glacial lakes are essentially devoid of life.



Figure 3

The second event the Althing participants couldn't have recognized was the evolution of Arctic char (*Salvelinus alpinus*) into four varieties or morphs in only a few millennia in Thingvallavatn. The Arctic char (Fig. 3) are a kind of trout. Without getting into the specifics, the char split into four groups. Two groups are dark colored and feed amongst the bottom rocks. The predatory types are silvery colored feeding in the clear water. The bottom feeders have mouths beneath their blunt noses while the flesh eaters look

more like our trout. All four groups seem to be reproductively isolated.

The Vikings were not unaware of these fish as it is reported they fished on Thingvallavatn with hand lines in holes cut in the ice. They also used woolen nets to catch *murta*, one of the plankton-eating varieties. One of the researchers reports that char's flesh tastes like fresh-ground walnuts. So, while the settlers could not have known their land was splitting apart and char were evolving, you can bet they enjoyed the eating.

Reference: "Discovery," the journal of the New York Museum of Natural History, June 1996