
Kelp holdfasts in peat as an anthropogenic signature on the Burin Peninsula of southern Newfoundland, Canada

ALAN RUFFMAN

*Geomarine Associates Ltd., P.O. Box 41,
Station M, Halifax, NS, B3J 2L4.*

Geological work was carried out in the freshwater peat bogs along the south coast of the Burin Peninsula in 1993–1995 during a search for tsunami-laid deposits. Peat monoliths were collected in, or close to, the communities of Lamaline, Point au Gaul, Taylor's Bay, Lord's Cove, Lawn, and St. Lawrence. In a number of locations a remarkably sharp tsunami-laid sand layer was found marking the onshore incursion of the November 18, 1929 tsunami (see photograph at the Dalhousie University Department of Earth Sciences website <www.me.guma.earthsciences.ca/staff/ruffman/ruffman.htm>). In numerous localities, as the peat monolith was cut and removed, isolated, well-rounded, large pebbles and small cobbles were found, sometimes below the tsunami marker and sometimes above it. We had no logical explanation for these occasional finds.

The common element appeared to be an association with communities and former 'meadows' where cattle were known to have been kept and grazed. A series of test monoliths were examined well off the relatively new road between Lawn and Lord's Cove in an area where there had not ever been any known human settlement or farming activity; there were no isolated rounded rocks to be found. The origin of these rounded rocks was eventually realised to have been a result of a process known locally as 'kelping'.

Each Fall as the weather becomes progressively worse, 'kelp', including both *Laminaria* and smaller, more leafy varieties of seaweed, are broken loose and thrown ashore in windrows along the sandy and gravelly beaches of the area. By November such beaches are marked by tall, steep-sided piles of seaweed gathered up by local residents to be spread on gardens and, at one time, to fertilize the meadows. Thus the finding of 'kelpstones' in peat can be taken as a clear indication to an archaeologist of former human occupation, and of the nurturing of 'meadows' for livestock to feed on.
