

## **HUMAN REMAINS ON BALNAKEIL BAY**

**We have received a report on the sword found with the remains from the Conservation Department of the National Museum.**

**The sword has been examined, and is in 3 pieces. The wooden scabbard, or sheath, seems to be intact along the full length of the sword, as does the possible leather covering. Underneath this, and the corroded material, the iron sword does appear to be in fairly good condition.**

**The conservation work is not without problems. These are due to the presence of the three different materials, wood, iron and leather, each of which require different treatment. A compromise has to be found however, as the materials cannot be separated at this stage.**

**The first step is to stabilize the condition of the sword and prevent further corrosion. Various methods were available, but tests on some small fragments proved that most were unsuitable as they damaged one or other of the parts. A solution was finally found, which involves keeping the sword in an atmosphere of high humidity, but excluding oxygen. This method reconstructs the original, damp environment of the sword, but prevents further corrosion by excluding oxygen - it is the oxygen and water which react together to cause the corrosion.**

**To achieve these conditions, the sword has been placed in an air-tight container, with cotton wool which has been saturated in pure water. Nitrogen gas is then pumped into the container, preventing the presence of any oxygen.**

**Now that the condition of the sword has been stabilized, further tests will follow to determine the best method of treatment. Along with these, x-rays will be taken to determine exactly how much of the iron work remains, and whether the hilt survives.**

**FURTHER INFORMATION WILL FOLLOW**

**WATCH THIS SPACE**