



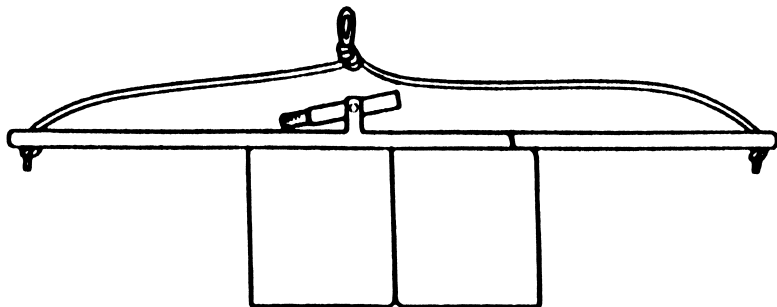
BRASS BOTTOM SAMPLING DREDGE

CODE 1061

INTRODUCTION

The LaMotte Bottom Sampling Dredge, a modification of the well-known Peterson dredge, provides a convenient method for collecting bottom sediments. It is used for collecting bottom sediments which may contain mud, sand, ooze, and gravel; however, it is not designed to collect samples from rock bottoms. By using a bottom sampling dredge, a number of different analyses can be made. Since the bottom sediments represent a good area to find macroinvertebrates and benthic algae, the communities of organisms living on or in the bottom can be easily studied quantitatively and qualitatively. A chemical analysis of the bottom sediments can be conducted to determine what chemicals are available to the organisms living in the bottom habitat. Also, the structural characteristics of the bottom may be examined and related to the biological and chemical analysis. All of these different studies are made possible through the use of a bottom sampling dredge.

Whenever samples of the bottom are taken, every effort must be made to insure that the samples are truly representative of the whole area. Much of this depends upon the judgment of the individual taking the sample and their individual study objectives. In most cases, as many samples as possible should be taken since one sample has no value statistically. The time interval between sampling and analysis is not critical for a mechanical or physical analysis, but immediate analysis is recommended for both biological and chemical examinations.



(over)

INSTRUCTIONS FOR USE

The Bottom Sampling Dredge is shipped completely assembled. The dredge has a bridle that reaches between the tips of the brass arms of the dredge. Note that when the bridle is free (no tension upon it), the dredge springs open. When the dredge is lifted by the bridle, the jaws of the dredge snap shut.

A line is attached to the middle of the bridle to retrieve the dredge from the bottom. Affix this line securely. The dredge must be allowed to fall freely through the water. There must be no tension on the retrieving line until the dredge has made contact with the bottom. There are holes in the upper part of the collection chamber to let air escape from inside the chamber, thus speeding the descent of the dredge. When the dredge has made contact with the bottom, pull up on the retrieving line with a smooth, steady hand over hand action without jerking the line, until the dredge is above the water surface. Hold the dredge by the retrieving line or by the middle of the bridle until you are ready to place the contents of the dredge into a collecting container. If tension on the bridle is relaxed, the jaws will spring open before the desired time and the contents will be lost. A white porcelain or plastic pan provides an excellent receptacle for examining the sample.

LaMotte Company

Helping People Solve Analytical Challenges®

PO Box 329 • Chestertown • Maryland • 21620
800-344-3100 • 410-778-3100 (Outside U.S.A.)
visit us on the web: www.lamotte.com