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A PERMANENT TYPE POISON STATION FOR PORCUPINE CONTROL

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ABSTRACT: A method has been devised to protect the poison strychnine-salt blocks used in controlling porcupines, Erethizon dorsatum, from the weather, killing of non-target animals and vandalism.

An aluminum poison bait station has been developed which is light weight, durable, camouflaged, and safe. These structures are easily constructed and are relatively inexpensive when longevity is considered. Porcupines are controlled effectively and economically using this method

INTRODUCTION

The use of a salt-strychnine mixture for the control of porcupines is not new, Gabrielson (1930) described the use and placement of the poison salt blocks.

This paper describes the procedures taken in developing an acceptable method for the protection of the salt blocks from the weather, especially heavy snow loads, non-target animals, and human disturbance.

In 1961, the Medford District began porcupine control using the Weyerhaeuser Hardboard "A" frame poison bait station as described by Heacox and Lawrence (1962).

It soon became evident that porcupine control stations constructed from tempered hardboard, pine lumber and plywood were subject to extreme deterioration within a few years. Weathering due to heavy snow loads, rot, and partial destruction by the chewing of the porcupines are the major reasons for the failure of these type stations.

DESCRIPTION AND USE

Our approach towards porcupine control is not a new method, but a slight modification of structures used by others such as the Wood box, "A" frame, 15 gallon drum, and full-round culvert pipe. Bailey (1936) reports that artificially prepared shelters should prove successful if properly done and safeguarded.

A structure was required which would keep the salt-strychnine blocks dry and protected for extended periods. We therefore designed, in co-operation with Kaiser Aluminum, Medford, Oregon division, the porcupine control station illustrated in Fig. #1. This station is described in BLM Technical Note, April, 1968.

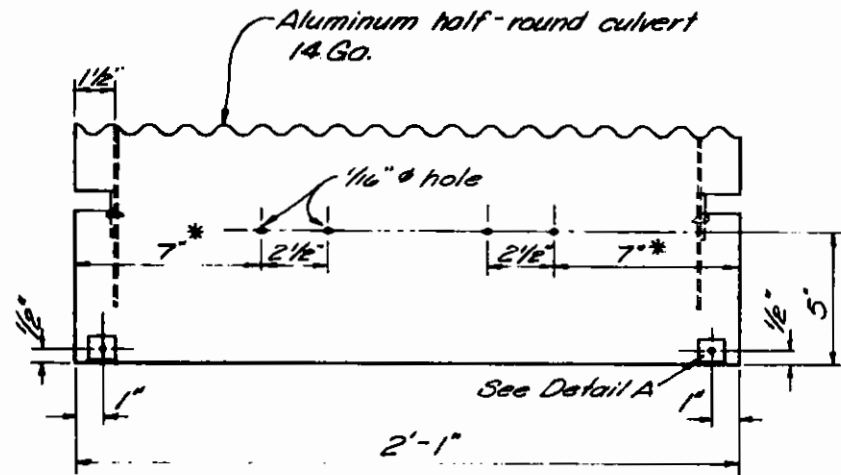
The station used by the Bureau of Land Management is constructed from a 25-inch long section of 18-inch diameter aluminum half-round culvert. This prefabricated station (fully constructed) weighs only six pounds and requires only the attachment of the salt-strychnine blocks prior to placement in the field. Table 1 lists the price quotations for the aluminum stations.

Use of the aluminum bait station gives the following advantages:

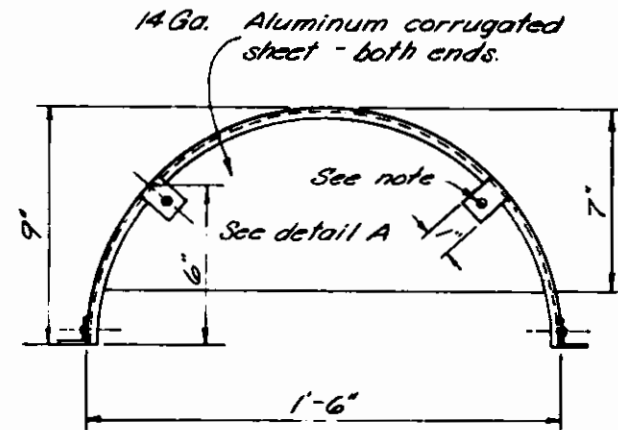
1. Life of the station is lengthened since aluminum does not deteriorate.
2. Salt blocks are protected from the weather thereby reducing leaching.
3. Stations are very resistant to being crushed by snow, debris, large grazing animals.
4. Porcupines can not damage stations by gnawing.
5. Stations are easily deployed due to their light weight and the ease with which several may be stacked together.
6. The stations are more economical due to greater lifetime.
7. Chances for accidental poisoning of game animals and livestock is reduced by the station's durability.

RESULTS AND DISCUSSION

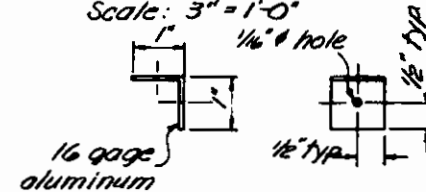
Aluminum half-round type porcupine control stations have been in use in the Medford District for nine years. The stations are effective. Recently however, the district kill had dropped off due to declining porcupine populations.



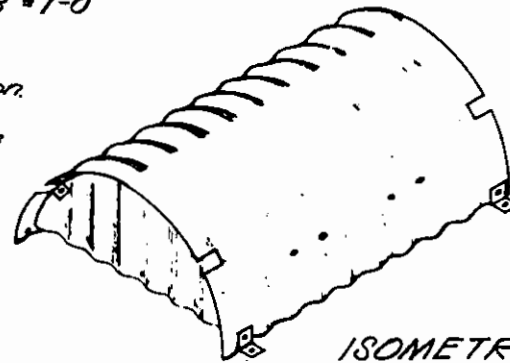
SIDE ELEVATION
Scale: 3" = 1'-0"



END ELEVATION
Scale: 3" = 1'-0"



DETAIL A (4 required)
Scale: 6" = 1'-0"



ISOMETRIC VIEW

NOTE: Aluminum screws and nails shall be used in fabrication. Fasten unit to railroad ties or similar material. Decadent logs should not be used.

* Measurement shall vary as needed to locate holes on ridges or in valleys of corrugation.

NOTE: Drilling of 1/16" hole in tab and bulkhead should be done in one operation to insure proper alignment.

U. S. DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT	
PORCUPINE CONTROL CYLINDER	
DESIGNED <i>W. L. H. H. H. H.</i>	RECOMM. <i>W. L. H. H. H.</i>
DRAWN <i>W. L. H. H.</i>	RECOMM. <i>W. L. H. H.</i>
CHECKED <i>W. L. H. H.</i>	APPROVED <i>W. L. H. H.</i>
SCALE AS SHOWN	
4-5-68	General Revisions
DATE	REVISION
DRAWING NO. B-1468-00-01 0007-01-01	

FIGURE 1.

Modifications to the original design have been developed over the years of use. For instance, all holes for station and poison block attachment are predrilled prior to going into the field. Visibility of the shiny aluminum was originally thought to be an advantage, however, after many cases of people disturbance, we have painted the stations brown to prevent vandalism. Stations are marked with "POISON" in red paint to protect the public from accidental poisoning.

TABLE 1

Cost of Aluminum Bait Stations for Porcupines, Kaiser Aluminum Co., 1969 Price Quotations.

Quantity	Unit Price
1 thru 24	\$10.50 each
25 thru 49	8.50 each
50 thru 99	7.50 each
100 or more	7.00 each

Prices shown include delivery to any point served by common carrier in Washington, Oregon, Montana, Idaho, Utah and Wyoming.

Inquiries may be addressed to the following locations:

Kaiser Aluminum and Chemical Sales, Inc.
2000 E. Columbia Way, Building 10
Vancouver, Washington 98661
Phone: 1-206-695-4471 or 1-503-285-7783

Kaiser Aluminum and Chemical Sales, Inc.
P. O. Box 1239
Coeur d'Alene, Idaho 83814
Phone: 1-208-664-8206

Kaiser Aluminum and Chemical Sales, Inc.
5305 Irving Street
Boise, Idaho 83704
Phone: 1-208-375-7610

Our major objective in developing this type of permanent structure was to provide our tree plantations with protection for extended periods under a wide variety of weather conditions.

The following precautions are recommended field procedures for the placement of porcupine control stations:

1. Limit of two salt blocks per station.
2. Refrain from placing poison stations near recreation areas.
3. In areas of livestock and big game use, stations should be anchored with steel fence posts.
4. Label the stations "POISON" in large letters.
5. Service stations annually.

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