LOCATION OF LEAN-TO

The Appalachian Trail project contemplates the existence of a continuous chain of shelters - either closed or open - at intervals of a moderate day's journey. The location of each particular structure is therefore considered in connection with the other units in the chain. The Conference has circulated a proposed master List of Lean-tos for the entire Trail, with the view of coordinating the selection of shelter sites and to avoid the existence of gaps. It is of paramount importance that the interval between shelter sites be not more than ten miles, preferable from eight to ten miles. Such spacing avoids undue exertion for travelers carrying heavy packs and yet permits "skipping" a lean-to by more strenuously inclined travelers for their day's journey. Since the problem of location here is one of the development of the entire chain along the Appalachian Trail, other than the brief comments hereafter made, no extended consideration is given to this question of location.

A primary consideration - and often a controlling factor - in selecting a site for a lean-to is the availability of a dependable source of drinking water.

The site on which the structure is built should have adequate drainage so that the earth floor will remain dry in wet weather.

It is most desirable for reasons of sanitation to construct a toilet near the lean-to. This should be located so that the drainage cannot contaminate the drinking water supply. A dug pit for garbage, which may be located near the toilet, helps materially in keeping tin cans and refuse from being spread through the surrounding area. Where the spring, toilet and garbage pit are not readily visible from the lean-to, direction signs and brushed-out trails should be provided.

A simple stone fireplace in front of the structure is necessary. It localizes the building of fires and greatly reduces the fire hazard. A grate for cooking, about 16" high, is most desirable; such a grate should be permanently built in or fastened to prevent its being carried away. Part II of "Park and Recreation Structures", a National Park Service publication (for sale by Superintendent of Documents, Washington, D.C. at 75 cents for each of three parts) contains photographs and drawings of several styles of open fireplaces. The fireplace is usually placed close to the front or "deacon seat" of the lean-to with the view of radiating heat into the lean-to. Sufficient space must be left, of course, to avoid any possible danger from fire.

LEAN-TO PLANS

The dimensions of the structure are indicated on the attached drawing. It is, of course, recognized that the specifications used may be varied to comply with the materials locally available. The primary function of this drawing is to furnish satisfactory dimensions. (The wide chamfer - etched to prevent disfigurement - is a local construction used in Pennsylvania, and its use is, of course, no part of the primary design.)

THE ROOF

Desirable roofing materials are either slate-covered asphalt, 4-in-1 composition shingles or wood shingles. In applying the shingles, always carry a double row at both drip lines, letting this doubled first row project about one-half (1/2) inch beyond the first row, so that all drip falls from the shingles and not from the roof boards.
LIST OF MATERIALS (APPROXIMATE)

450 lin. feet 8" log for siding
65 lin. feet 6" log for bunk rails and logs. (If framed from sawed lumber, substitute 78 linear feet 2" x 8" yellow pine.)
10 lin. feet 2" x 8" yellow pine (door framing)
25 sq. feet Shingling (roofing)
32 squares Shingles
40 lin. feet Hardware cloth; 2 ft. width, 1/8 inch mesh (2 x 3), No. 16 gauge. (Should not be No. 19 gauge.)
5 lbs. 4d Shingle nails for wood shingles. (Substitute 5/8" L.H. galv. roofing nails for composition shingles.)
15 lbs. 8d Nails
25 lbs. 30d Nails
2 lbs. 1/2" L.H. galv. roofing nails for Hardware Cloth
8 gal. No. 1 Creosote

Chinking material may be varied to suit local preferences, and the amount will depend on how deeply the logs are notched as well as the chink-filler used. For the width type of chinking used in Mont Alto State Forest, Pennsylvania, the following figures apply:

3 1/2 bbl. Portland cement
170 lbs. Hydrated lime
60 lbs. Powdered Oakum
Chink-Filler, galv. metal lath, scrap lumber, or peat. (Mortar should key in securely.)
APPALACHIAN TRAIL LEAN-TO

(Design modified slightly from that used in Mont Alto State Forest, Pennsylvania Department of Forest and Waters)

Not to Scale

See text for bill of materials

February, 1939

Bunks-Frame covered with #16 gauge 1/2" (2X2 mesh) Hardware Cloth. Nail Securely.

-WOOD SHINGLES 6" TO WEATHER
-Drip Overhang

NOTE
- Outside fireplace not included

FRONT ELEVATION

SIDE ELEVATION
Fig. 1. Plan View of 6-Bunk Frame Made Of Peeled Poles

Fig. 2. Shows How To Stretch Hardware Cloth

Fig. 3. Alternative Construction If Sawed Lumber Is Used

10d nails, faed
Use piece of 1x2 (same as footboard)
2x8
20d nails

Cloth Sags

Cloth Taut