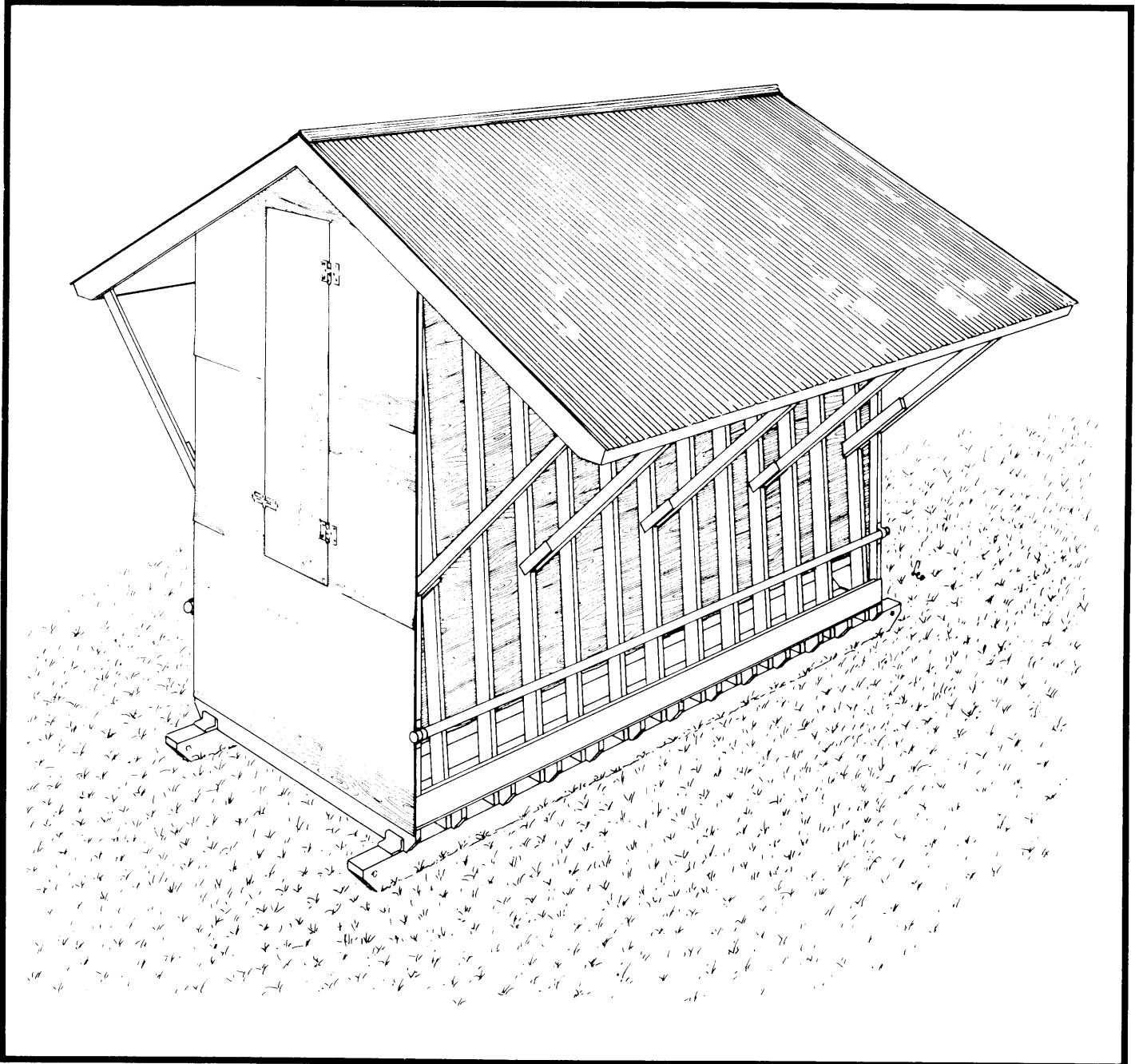


## CHOPPED HAY FEEDER FOR SHEEP



The Canada Plan Service prepares detailed plans showing how to construct modern farm buildings, livestock housing systems, storages and equipment for Canadian Agriculture.

This leaflet gives the details for a farm building component or piece of farmstead equipment. To obtain another copy of this leaflet, contact your local provincial agricultural engineer or extension advisor.

## CHOPPED HAY FEEDER FOR SHEEP

PLAN 4628 NEW 83:03

Chopped roughage is excellent feed for wintering ewes or supplementing feeder lamb rations. Besides being convenient for self-feeding, it lets you use poorer quality or less palatable feeds.

This portable self-feeder holds 2-3 tons of chopped hay, enough to last about 3 weeks. The 16 ft long feeder, feeding from both sides, will accommodate up to 100 ewes or 150 feeder lambs.

The feeder is built on skids, preferably of CCA pressure-treated wood to resist decay. If the feeder might be moved during the winter, be sure to block up the skids with small logs or poles to prevent them from freezing solidly to the ground. Or better yet, block up the feeder on a flat concrete or plank platform to give the sheep dry footing as well.

Choose a well-drained, sheltered site. If there is danger of the empty feeder being blown over, anchor it with guy wires at each corner.

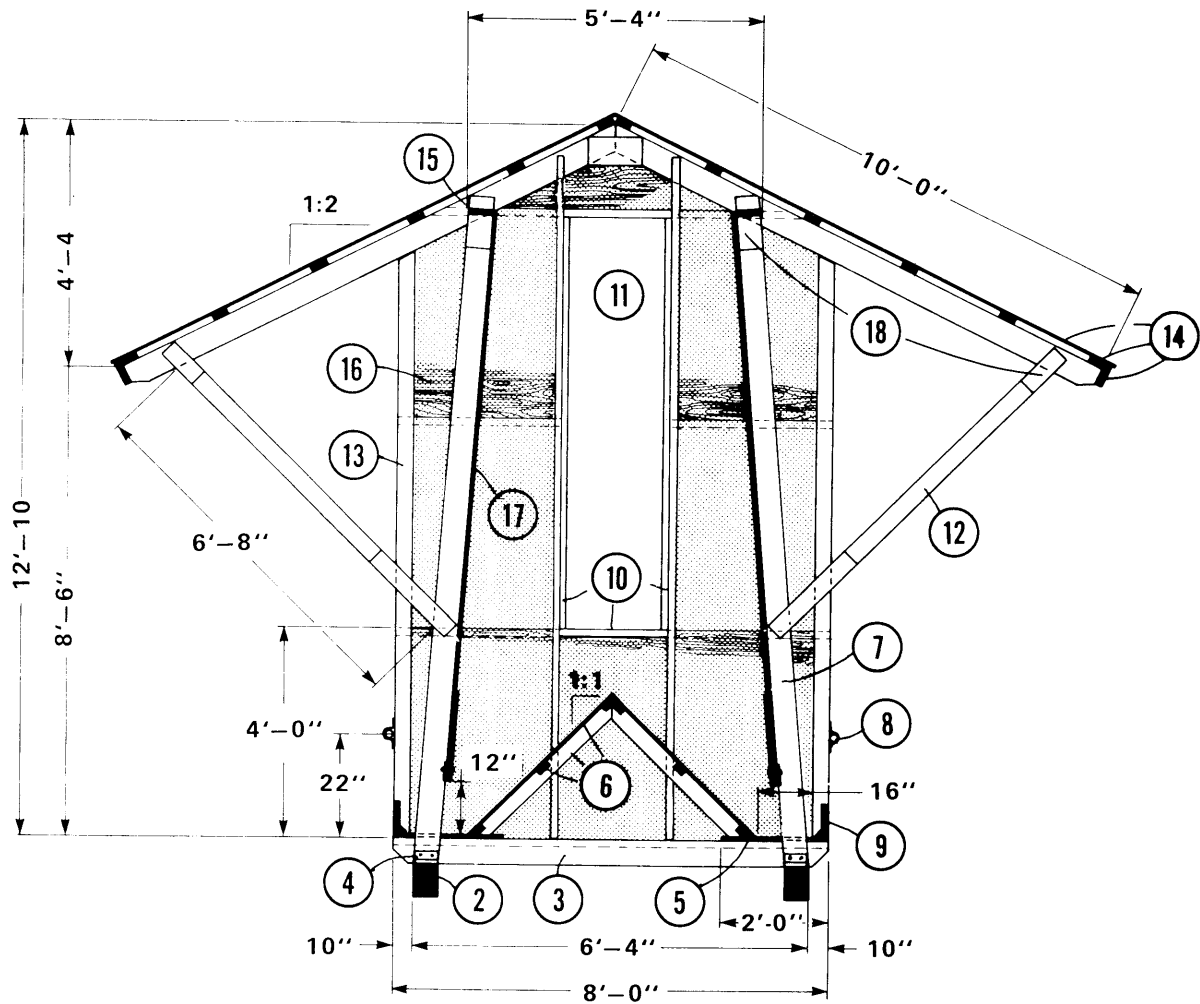
Construction is of 'exterior sheathing' grade plywood on a stud frame. The stud walls and rafters are built on the ground as rigid frame sections, then tilted into place and nailed to the sides of floor joists to form a strong framing unit. Wall sheathing is attached to the inside edges of the side wall studs to form a smooth surface so feed will flow properly. Endwall sheathing is on the outside for better weather protection and appearance. Walls require 18 sheets of 3/8 in. plywood, the floor requires 2 sheets of 3/4 in., the A-frame requires 4 sheets of 1/2 in., and end doors can be made from one more sheet of 3/4 in. Aspen flakeboard sheathing (exterior grade) may be substituted for the plywood wall sheathing by increasing the thickness a little above that specified for plywood. In either case, two coats of a good latex-based pigmented exterior wood stain will improve the appearance and durability of the outside end panelling and wood roof trim.

The A-frame floor helps to empty the self-feeder completely with minimum labor. Plywood floor panels are cut through, to fit around each wall stud. The side openings are correct for cut feed; however this opening can be reduced in height for rations containing some grain. If adjustable closure panels are added, it is important they be on the outside of the wall sheathing, between the studs, so they do not interfere with feed flow. The inside wall surface must be as smooth as possible.

A large door in one or both ends gives easy access for filling and for poking at the feed if it blocks up. The pipe neck rail is over the front of the trough to conserve feed and to keep sheep from walking in the trough.

Chopped hay feeders are prone to bridging, and require a certain amount of attention. It may be desirable to cover the inside of the two sloping side walls with galvanized sheet steel or heavy polyethylene sheet to make the feed slide easily. The type of feed, fineness of cut and method of filling influence performance. Chopping the hay to a theoretical cut length of 1 inch is best. Do not pack feed into the feeder, as with a forage blower; conveyor type elevators work better for this.

1. feeder cross section
2. 6" x 8" x 18' - 0" CCA pressure treated skids, hole at each end for towing chain
3. 2" x 6" x 8' - 0" joists @ 16" oc
4. steel angle, 2" x 2" x 1/4" x 6 long (a 8' - 0" spacing, 2 lag bolts to 2, 2 bolts to 3
5. 3/4" plywood floor
6. 2" x 4" hopper joists, @ 4' - 0" oc;  
2" x 4" strapping; 1/2" plywood floor
7. 2" x 6" studs @ 16" oc fitted through holes  
sawn in floor 5
8. 1 1/2" or 2" galv. steel pipe neckrail  
screwed to endwall with pipe clips at ends,  
drill and nail to studs
9. 2" x 8" keeper, 45° cove strip cut from  
2" x 2"
10. 2" x 4" endwall studs and blocking notch in way  
of 3 and 14
11. 2' - 0" filler opening, one or both ends,  
door of 3/4" plywood
12. 2" x 4" roof support at endwalls and at rafters  
@ 4'-0" oc, 2/ 4" scab to inside of 7 at nailer  
13
13. 2" x 4" nailers
14. 2" x 6" x 10' - 0" rafters @ 4' - 0" oc, 2" x 4"  
purlins @ 2' - 0" oc; 2" x 6" face board, galv.  
steel roofing or (asphalt shingles on 3/8"  
plywood sheathing)
15. 2" x 4" blocking between rafters, galv.  
joist hangers to rafters
16. 3/8" plywood cladding at endwalls; at  
horizontal joints overlap 2" and clinch nails
17. 4' - 0" x 8' - 0" x 3/8" plywood hopper  
sides, bottom lined with 2' - 0" flat gale.  
steel folded around bottom edge of  
plywood and rivetted
18. 3/8" plywood gussets both sides



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