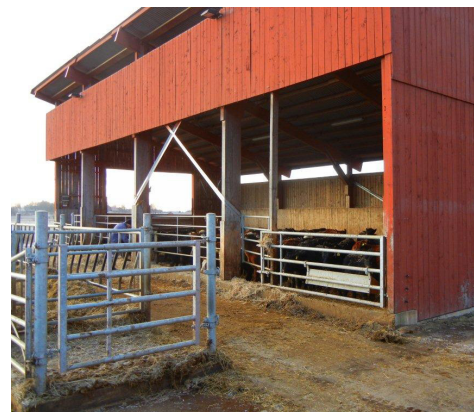


# SIMPLE CHEAP BUILDINGS FOR LIVESTOCK



A simple, cheap functional building for livestock.



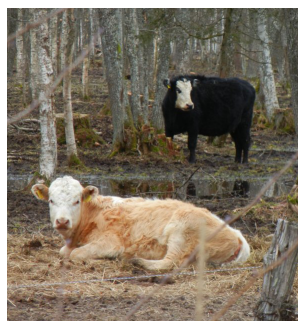
Concrete feeding area keeps the area clean.



If the feeding area is located under a roof the manure will stay solid. It can then be scraped off and stored on a manure plate.



If the feeding area is in the open air the manure is mixed with rainwater and becomes slurry that can be pumped into a lagoon for storage.



When cattle are kept outdoors during the winter without a shelter the manure can not be collected leading to a lot of nutrient loss, the ground is damaged and the animals can not be kept clean.

## WHAT PARAMETERS DOES THE BUILDING NEED TO FULFIL?

**Shelter against wind, rain and snow.** The building should have at least three walls and a roof. If possible the open side should be located to the south. The lower parts of the walls, up to about 1.50 m, have to be windproof.

### Feeding area with free access to fodder.

The feeding area should be calculated on 0.7 m<sup>2</sup>/3 cattle with a weight of less than 650 kg.

**Drinking places** with a minimum of 1 cup/25 cows.

**Lying area on deep straw bedding** with an area of 3.5 m<sup>2</sup>/cow

**Boxes for calving** with one box /10 cows or heifers. The box can be made for single calving or calving in a group. A single calving box should be about 9m<sup>2</sup>. For 4 cows in the same box 8m<sup>2</sup>/cow is sufficient. Boxes can easily be made by using gates of metal or wood.

**Malady box** with 1 box/50 cattle. The box must keep a temperature of +10°C when used.

**Night light must exist** in the building as it needs to be possible to care for the cattle even when it is dark outside.

**Pathway, laying area and feeding area of about 8,5m<sup>2</sup>/cow.** The cattle need enough space to move between lying area, feeding area and drinking places without any problems.

*These are minimum recommendations based on Swedish regulations.*

## SOME TIPS FOR CONSTRUCTION OF THE BUILDING AND MANURE HANDLING

- Construction is often made of wood, as this is easy and cheap to work with. The wooden pillars, which hold the roof, cannot come in contact with the deep straw bedding.
- Roof with a slope of at least 18° using sheet metal roofing with condensation protection.
- Walls made of panelling with spacing between the panels and wind proofing in the form of a moisture resistant board.
- The walls inside the building should be made of concrete up to 1,5 m height to enable the removal of the deep straw bedding with a tractor

## TO CONSIDER

Before you start building make sure that you have the permissions that are required. The illustrations and recommendations in this factsheet are general, make sure that you fill the requirements set by the authorities and that you engage a building technician to draw your final building!

## READ MORE

[www.jordbruksverket.se/djur](http://www.jordbruksverket.se/djur) (Swedish)

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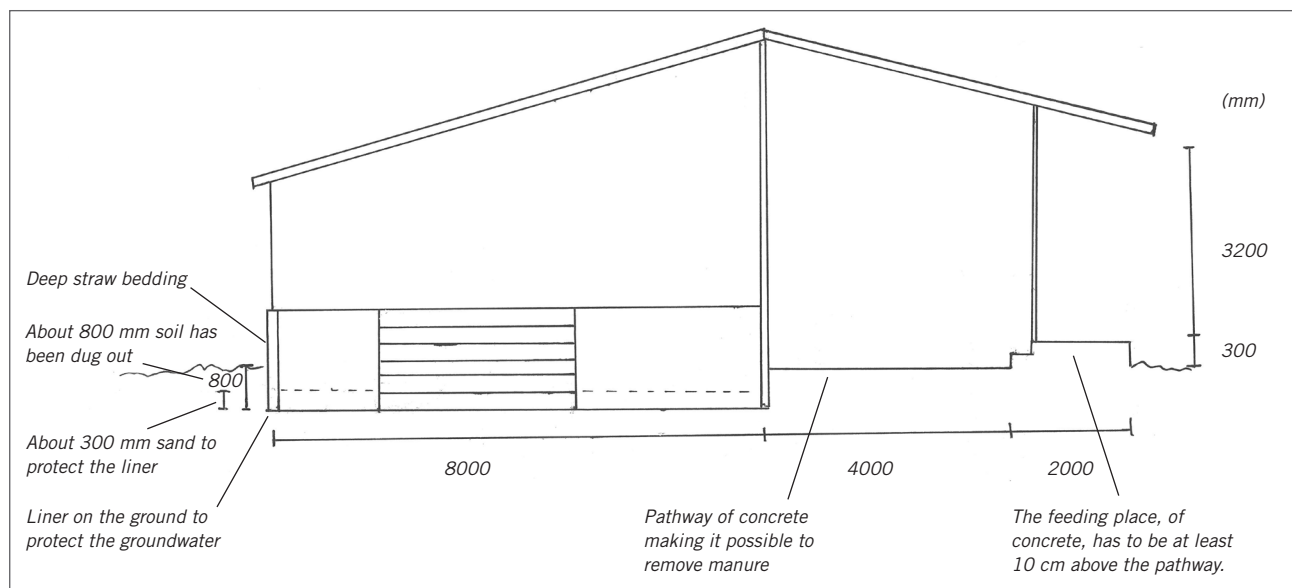


Figure 1: Building materials for cow house with deep straw bedding, pathway for scraping and feeding place under a roof

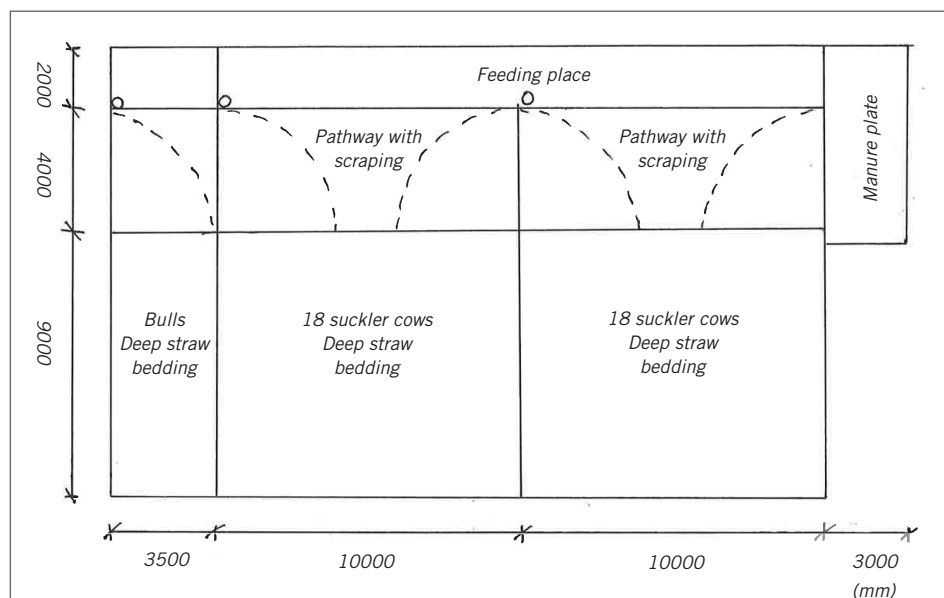


Figure 2: Simple cowshed for 36 cows

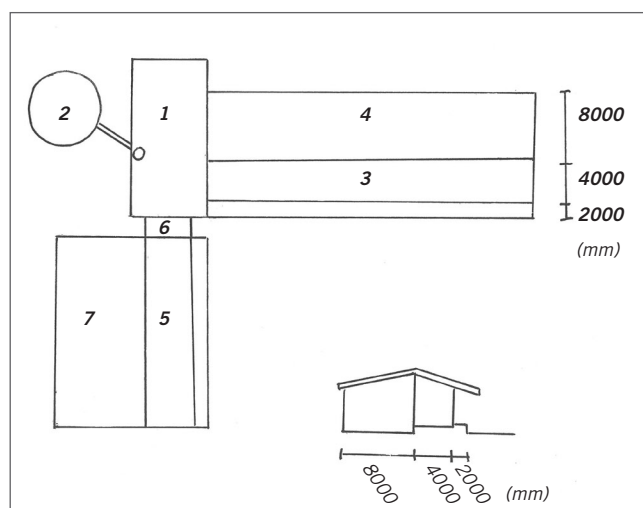


Figure: Example of how to build a cowshed in stages

- 1 Build manure handling area with concrete. It will be used as a feeding area for cattle and the inner part used for storing manure. At the lowest part of the concrete plate there needs to be a well for liquid substrates.
- 2 Construct lagoon for urine close to the manure handling plate. Liquid substrates will be pumped from the manure plate.
- 3 Construct feeding place, including the area made of concrete. The feeding area can be built in sections depending on financing possibilities.
- 4 Build cowshed with a floor made of liner covered by sand. The shed can be built in sections.
- 5 Construct feeding place 2, including ground made of concrete. This will be in a 90° angle to the first one.
- 6 Manure from the concrete will be moved to the manure plate by scraping with a tractor.
- 7 Build cowshed 2 with liner covered by sand.