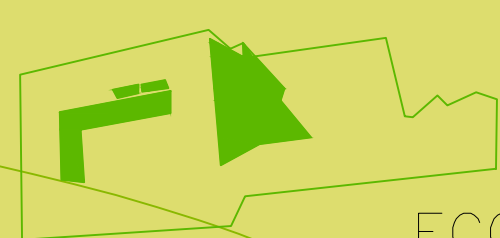
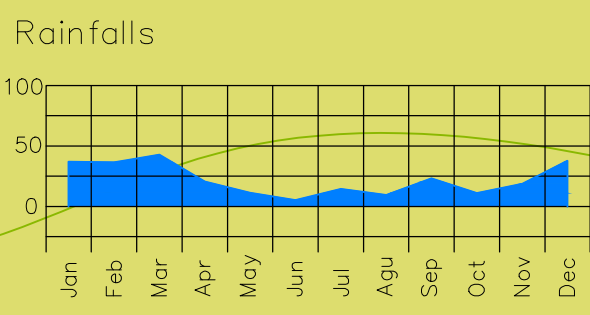
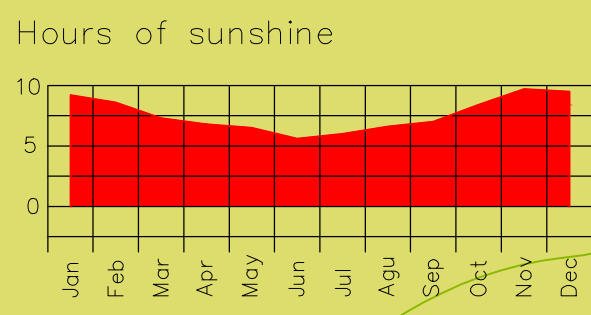
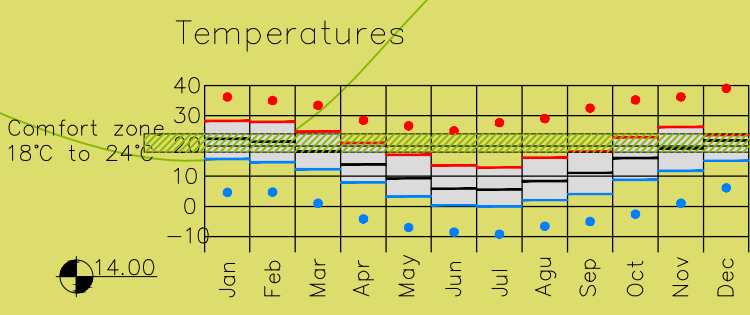
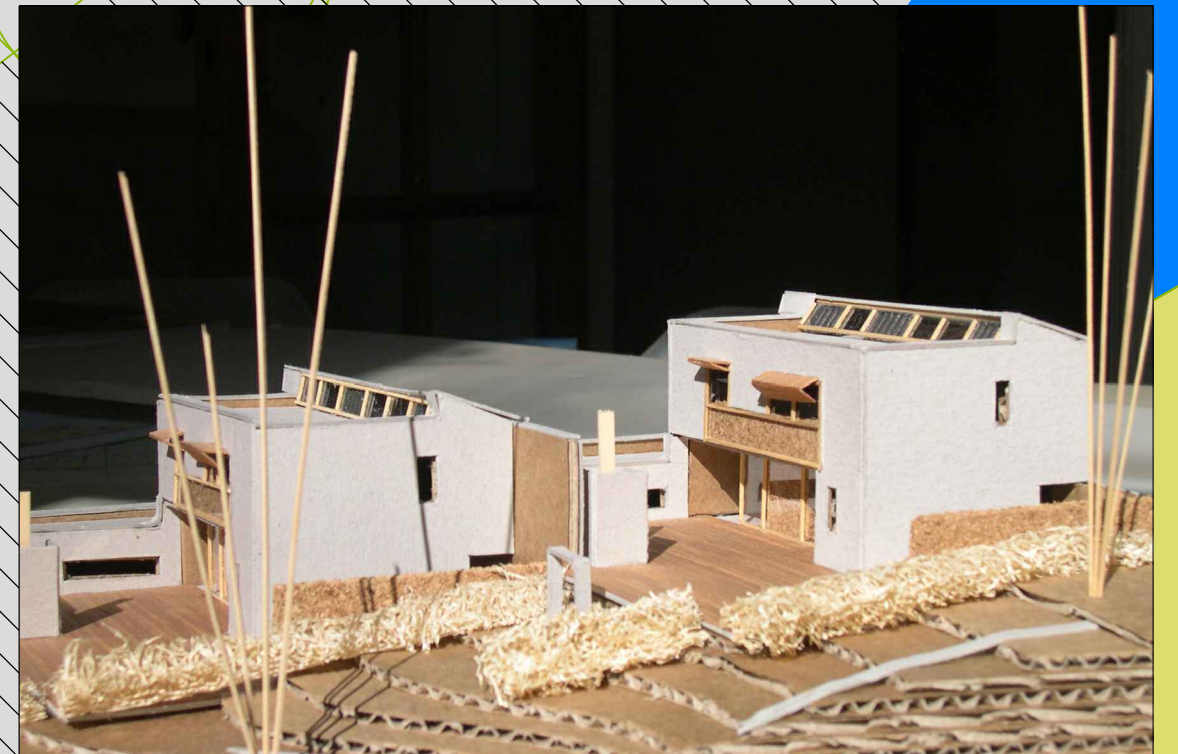


16.00

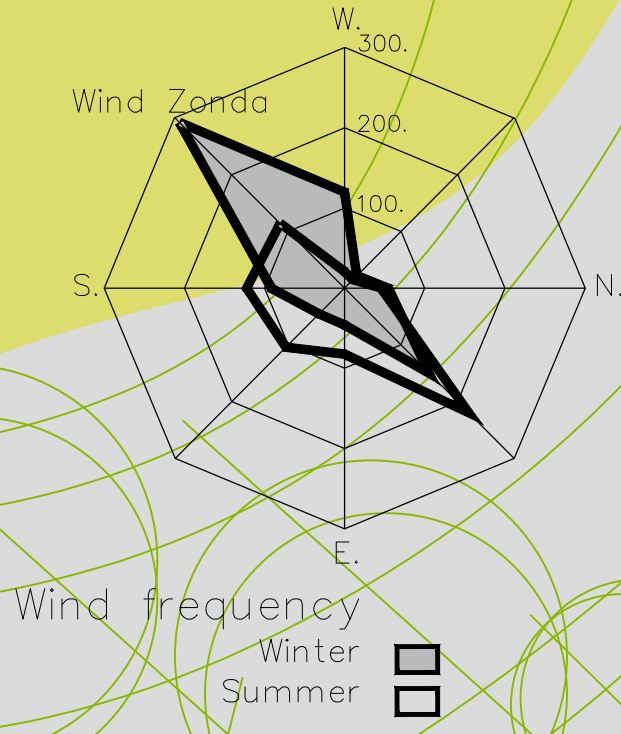
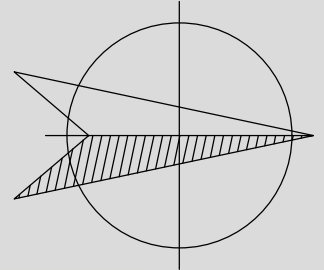


# Chacras de Corral

ECOHOUSE. Place: Mendoza — Argentina. Lat: 32°59'S.  
Long: 68°52'W.



Tank of  
general  
water  
reserve



Shade in Winter  
12:00 pm

Channel for water  
plant and  
humidification

Protected sector:  
Solar access in winter and  
solar protection in summer  
using deciduous trees (Species:  
Aguaribay).

Low shrubs  
Gorilla, Plaquilines, Retortuños,  
Altapacos, Atamisques.

Childrens play area:  
Sun all the year

## Requirements

- Winter:
  - Wind protection
  - good solar access
  - reduce impact of thermal swing
  - reduce heat loss
  - natural lighting
  - rational use of energy
- Summer:
  - solar protection
  - avoid heat gains
  - Humidification

## Design strategies

- tree barrier for wind protection
- compact buildings
  - wide spaces
- protected areas
  - good orientations (north)
  - limit depth of interior spaces
- controlled size of openings to the south, east and west
- Use overhangs in summer
- thermal insulation in walls orientated to the south and in roofs
  - materials with high heat capacity
  - Trombe wall
  - solar panels
- flushing of toilet with grey water
- Channel for irrigation and humidification

General Plan scale  
1:200

Wind Break —  
Eucalyptus

Tree barriers offers optimum efficiency when perpendicular to the predominant SW winds. This efficiency is in direct relation to the high of the trees, wich can cover a distance of 20 times thier hieght.

Organic gardening

10.00

6.00