

#### Habitat Needs

- To provide conditions similar to those in the wild, a tortoise habitat needs:
  - Well-insulated burrow
  - Water dish
  - Plants for browsing
  - Removable gate barrier
  - Escape-proof yard
  - Tortoise-safe environment
  - Areas of shade and sunlight

#### Tortoise burrow

- Tortoise is in burrow 95% of the time
- Tortoise is coldblooded: it regulates body temperature by moving in and out of sunlight and the burrow

Tortoise basks to warm up enough to forage



### **Burrow Styles**

Underground



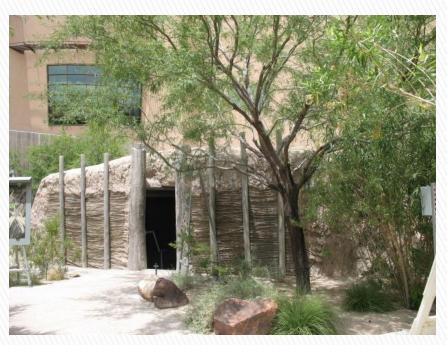
Aboveground



Insulated by surrounding and top soil

Large amount of soil needed for insulation

### Indian Dwelling—look familiar?





Like a big aboveground burrow, with several feet of soil insulation on top and on the sides

Very heavy soil insulation on the sides

# Water Dish Styles

Shaded Dish



Unshaded Dish



Water is sure to keep cool

Very shallow water is cooled by the slightest breeze

### Plants for Browsing

It's important for tortoises to browse independently and not have to be fed



Some MegaDiet---lots of browsing

Tad nibbles on tufted evening primrose

#### Removable Gate Barrier

- Barrier stays in place when the gate is left open inadvertently.
- Most lost tortoises escape through the open gate.



Gate opens outward while board stays in place

When plywood rests on concrete or rock slab, tortoise can't see or dig out.

## Las Vegas Habitats

- Custodians will tell us:
  - What challenges they faced in developing the habitat
  - Any special accommodations they made
  - Safety issues they had to overcome
  - Special features they put in their habitats
  - What plants are available for browsing—and which ones the tortoise eats



Burrow—unfinished



Shaded water pavilion



Solid caliche made digging next to impossible

Large dish fed by automatic sprinklers

Back yard (left)



Tortoise area (right)



Note gate barrier next to house

Plant area (left), burrow (center), water (right)

Gate barrier



Barrier on sliding gate



Removable barrier blocks hazards

Barrier will prevent tortoise from seeing out and getting stuck

Plant area

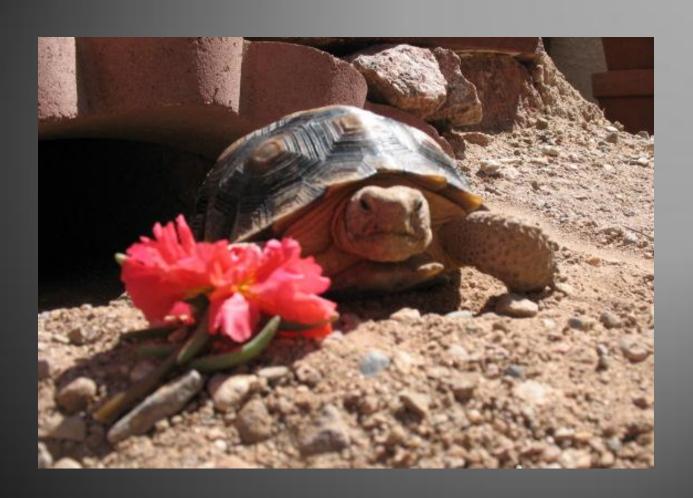


Potted plants



Rose bushes in place. Plants for browsing to come. Will remove several rocks for tortoise access.

Potted plants can be tipped on side as occasional treats



Nice burrow

Shaded water dish





Note rock holding stem down for easy eating





Grapes, dandelions, and other plants for browsing





More browsing, plus a bench for custodian

Special barrier to avoid squeezing Konna at the corner of the gate





Back-to-front view of habitat

Blocked-off hazard





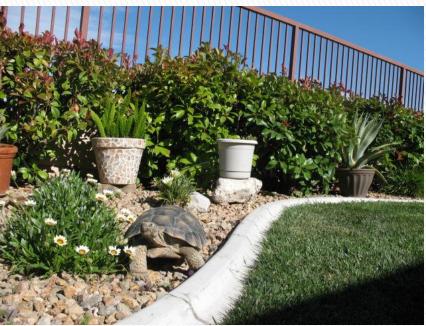
Comfy sitting area

Ingenious cover to protect young plants (right)

Removed some grass to make dry area







Burrow (center) and browsing plants (left)

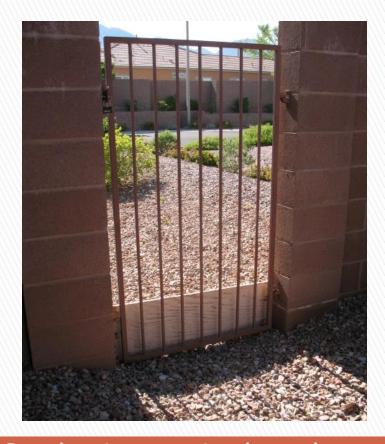
Beautiful tortoise!





Yummy plants and doggy friend

Prune heavy foliage to make walkway by wall



Gate barrier stays in place when door is open. Needs solid base so tortoise can't see or dig out.



Block off hazards





Cover with plywood, fencing that tortoise can see through

View of plywood from street



#### Maxine taking it easy >>

Heavy foliage is pruned to make for easy walking around the perimeter





Water dish with stepping stone for wee ones

Tortoises can walk to all areas on dry ground, which is easier than walking on grass

Long-standing burrow



Dandelions everywhere









Well-worn pathway along perimeter of property

Large fig tree gives grand shelter





Hatchling Pen-unused right now

Ramp admits small tortoises and blocks large ones







Grape branches trail on ground for easy eating

Grape trimmed from Tad's walkway; nice resting place





Globe mallow bent down or held in place with a rock

Tortoises bite and pull—need attached leaf





Dandelion patch

Salad bar. Note that the Tad can't reach the poisonous tomato leaves planted in a flower pot





This year I am eating dark-colored pansies

And yellow evening primrose





Mexican evening primrose (right rear) can be contained and tipped on side for nibbling

Tad won't eat the white petunias, only dark-colored ones



Desert willow (left) blossoms all season long-pick a handful daily

Shallow walk-in water feature (right)





My favorite red roses grow without pesticides in the front yard

Gardening equipment is blocked off



### Chuck's Chambers - Before





Large yard with many areas of shade and sun



Building projectsblocked off by shorttemporary walls



Beautiful burrow



Shaded water dish (They'll cut my grass soon so I won't choke on the long blades of grass)



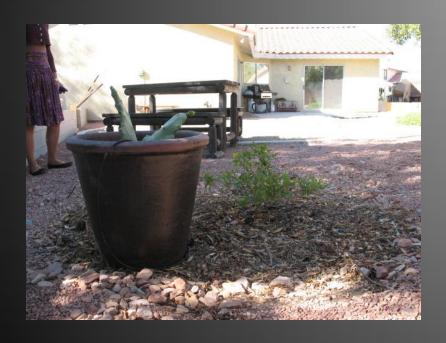
Verbena and gazenias

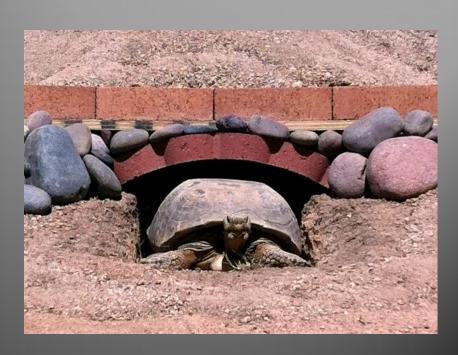
Hollyhocks





- Spineless cactus in I love my new pot and yellow bells
  - burrow!





# Big & Runtley's Realm



## Big & Runtley's Realm





Aboveground burrow

Water dish

## Big & Runtley's Realm





Mexican evening primrose

Future expansion, when Windsor block planter is restructured to avoid climbing

#### What Does a Habitat Need?

- The basic elements are very important
- No need to be fancy
- Include as much space as possible
- Must be outdoors
  - Well-insulated burrow
  - Water
  - Plants
  - Removable gate barrier
  - Tortoise-safe area

