

CACTUS HOTEL

- Final Version -
12 Feb 2023

TC COMMENTARY

- 00:03 Once, the whole world was a desert.
- 00:10 Dry, hot, a barren wasteland. Like deserts typically are.

 In the Wild West of America, where I come from, nothing has changed.
- 00:24 I'm used to it. 'Adapted', as you humans would say ...
- 00:30 When I put down my roots over 200 years ago, only a few of you dared to
 come down this way.
- 00:40 But you humans and I – we have something in common:

 Guests are always welcome.
- 00:50 We can offer them everything their hearts desire: food, water, shelter ... and
 protection ...
- 01:00 ... from the hot desert winds!
- 01:13 I ... am *Carnegieia gigantea*, a Saguaro! A *massive* cactus.
 Like a Methuselah, as you humans would say.
- 01:25 My time is coming to a close...
- 01:31 ... but *wait!*
- 01:36 *Before* I bid you a final goodbye, listen to my tale ...
 ... the story of this *desert!*
- 02:00 **Title: Cactus Hotel**
- 02:10 Let's go back a little ... 150, 180, 200 years.
- 02:22 Before cars or light bulbs had even been invented, and I was still just a
 teenager.
- 02:34 I was happy then! You see, I grew up in the shadow of a Palo Verde tree.
- 02:41 Exposed directly to the sun, I would have withered quickly.
- 02:50 The desert is ruthless. To thrive here, you have to be prepared.

03:00 And have a very thick skin.

03:20 Or... be immune to pain.

03:29 Curve-billed thrashers are like fakirs on a bed of nails. They can handle the spikiest of entanglements.

03:50 And here their young are safe from nest-robbers.

04:06 But their parents constantly have to run the gauntlet for them.

04:14 When I was growing up, life without shade would have been unthinkable.

04:23 The Palo Verde protected me from the sun's burning rays.

04:31 Like a parasol, its sparse crown kept the ground cool and damp. Without its aid, I would have perished.

04:48 Sometimes the Palo Verde had guests...
A costa hummingbird's nest is about the size of a thimble ...

05:03 ...its young barely bigger than a hazelnut.
For nests the birds weave spider silk into tiny bowls that stick to the smallest twigs, an ideal home for their offspring.

05:18 They grow up quickly, those kids, After only three weeks they fly off into the world. Three weeks! They're gone in the blink of an eye.

05:38 As the decades went by, I grew stronger and tougher. After about 50 years my life in the shadows was over.

05:53 I had outlived my nurse tree.

06:00 Its canopy was gone – and I was ready to brave the sun.

06:09 The palo verde's legacy was the protection it provided ... and the precious water our roots shared.

06:24 The water I inherited from it lived on in me.

06:36 Now I was big enough to cast my own shadow. Perfect for freshening up in the morning.
Just in time for breakfast.

06:48 „Bed and Breakfast for squirrels“ ... my life as a Cactus Hotel had begun.

06:53 Desert iguanas can withstand intense heat, but always need shelters within reach.

07:02 Their 'Check-In' is purely a formality.

07:09 The first two arrivals!

07:14 But who's at the front desk and who's the guest?

07:20 My front yard becomes *the* place to meet.

07:36 That has never changed. See and be seen, and pretty soon you get used to each other...

07:44 Now gestures may vary between species, but a tail-flick is universally understood: "This is my spot!" "No cuts!"

08:01 After they're done fighting over the best seat in the house, it's time to chill.

08:13 When my neighbors the Cholla cacti shed their shoots...
...my front yard turns into a thorny minefield.

08:31 Impossible for many small visitors to cross.

08:45 But here in the desert we have guests who aren't deterred by thorns or spikes.

09:03 The restless pack rat.
And like all pack rats, this one has a plan.

09:12 The remains of my former nurse-tree offer the perfect framework for it to build its new den.

09:25 A labyrinth of chambers and escape routes -- made to measure, a mini personal fortress.

10:07 The rattlesnake is just as perplexed as the rat... but it doesn't strike. It has settled down for an extended rest and isn't in a hunting mood.

10:25 Really? The rat remains skeptical.

10:32 But decides to stick to her plan.

10:42 As a seasoned builder she gets to work, doing what she does best: packing ... and *repacking!*

10:55 She keeps her eyes open for her favorite material: Cholla-shoots!

11:00 Which she hooks together to form a wall of thorns -- and the snake is locked out!

11:34 Pack rats aren't picky. They put to use everything they find.

11:53 In a single night, the comfort of my Palo Verde is transformed into a cosy new home for a pack rat.

- 12:17 Change can attract some curious creatures.
- 12:34 These quails are just out of reach for the coyote ... but what about that rat?
- 12:48 He can scent there's someone in there. But how to get to it?
The rat's done good work, her fortress is impregnable!
- 13:26 The coyote lost interest and retreated back into the desert.
Since then, the space under my old Palo Verde has been inhabited by generations of pack rats, with ever changing tenants.
- 13:46 At the age of about a hundred, my arms began to grow. That was a time when millions of people were migrating to America. Settlers found their way to my desert and marvelled at my size. A giant Saguaro cactus, close to 50 feet tall!
- 14:11 Like a candelabra, my arms reached up to the sky. My shadow stretched further than ever before, inviting guests to come my way.
- 14:31 Generations of squirrels came by for their daily sand-bath.
And others gathered round my trunk too.
So many different guests visited, and stayed.
- 14:46 My hotel had its very own reception area. The front yard became a meet and greet for travelers from far and wide.
- 15:26 When Thrashers turn up, trouble is right around the corner.
- 15:32 It becomes a free-for-all!
- 15:50 All that fuss in the lobby attracts predators.
- 15:57 The quails keep a watchful eye.
- 16:02 Their alarm calls warn everyone.
- 16:19 And that bobcat is left standing in the dust.
- 16:36 A rare guest enters my lobby.
- 16:51 This primeval dragon takes her sweet time ...
A Gila monster can reach 40 years of age, outliving most other animals in the desert.
- 17:05 Most of the time this venomous lizard only moves in search of food. But her thick tail tells us she's got enough fat stored in there to survive the next few weeks.
- 17:23 Her usual home is the underworld. For most of her life, the Gila monster remains hidden from the light of day.

- 17:39 Here, in a small burrow at the end of my roots, the female has deposited her treasure.
- 17:59 This well-protected, air-conditioned spot offers the perfect conditions for her eggs.
It takes three long months for the young to mature and hatch.

It can take up to two days for them to scramble free: the first – and probably the only - strenuous act in their laid back live of minimal effort.
- 18:34 In their first weeks they don't need to eat anything. They can survive on what they brought with them from the egg.
- 18:50 Even after hatching, they still remain underground for months. It's some time before they venture out into the light.
- 19:04 Deep down, at the lowest levels of my labyrinth of roots, there's a very special hotel store-room...
- 19:18 ...watched over, defended and tended to by a giant army.
- 19:30 Some of these ants' abdomens are filled to bursting. They're called „repletes“ and they're carrying a kind of liquid gold.
- 19:46 They're fed by their sisters until they can barely take another step ...
- 19:56 With their bloated bellies they're no longer suited for life on the ground.
- 20:02 They hang motionless from the ceiling, and look like tiny honeypots.
- 20:11 The honeypot ants create a valuable storage system. When food is short, the repletes share these sirupy reserves with the other colony memebers.
- 20:26 Life insurance for a whole city... a wondrous honey-factory in the vaults of my tangled hotel basement.
- 20:47 The best years of my life began just as you humans were on edge of the abyss, waging two world wars.
- 20:54 That's when my arms grew into a crown, and I became a majestic, multi-storied skyscraper. Ready for anyone looking for a home in the desert.
- 21:26 It didn't take long and the first suite was occupied.
- 21:42 And not by just anyone – but by America's largest owl.
- 21:52 Great horned owls need a good vantage point, and my upper floors provided an ideal panoramic view.
- 22:04 They didn't come every year, but one season there was a swarm of packrats here, and the owls raised four little owlets on my arms.

- 22:17 The parents had no trouble providing for their offspring. Over 200 rats disappeared into those little owl tummies during their 10-week stay.
- 22:45 One year later, and a little higher up, I had my first experience of unexpected renovations.
- 22:54 Only a woodpecker is strong enough to break through my waxen skin.
- 22:58 And this one has a motive, too. The 'Lady' over him has high standards – and his new home is not yet up to scratch.
- 23:12 One glance up, and the message is clear: You get back to work!
- 23:25 She even shows him how!
- 23:32 An inspection follows.
- 23:40 Hmmmm... not quite!
- 23:46 He moves on to another arm,
Another inspection.
Still not happy ...

... Working overtime!
- 24:24 At last the Missis approves.
Gila woodpeckers have a lot of stamina. Year after year they build a new nest cavity, creating ever greater living space.

So my hotel has more and more rooms - and vacancies are filled immediately.

New guests are lining up all the time.

The woodpeckers make sure it's *always* high season!
- 24:56 Flycatchers prefer a home in the attic.
- 25:02 Sparrows can be found on my right arm.
- 25:09 And just one floor down, the smallest of all owls, the elf owl, has its own branch.
- 25:22 In no time I upgraded from a two-star bed and breakfast to an exclusive resort with several luxurious towers.
Scratched up, dug under, hollowed out and always fully booked.
- 25:40 Word spreads quickly.
- 25:47 If the front desk is left untended, the gopher snake can slip past, all the way up to the apartment floors.

Not even my thorns can keep this scaly predator away.

Up it slithers. This is extreme climbing.

26:09 It's been spotted.

26:15 But the warning calls don't faze this snake.

26:27 Gopher snakes are feared nest robbers. Slithering silently towards their prey, to strike at lightning speed.

26:45 But this room is vacant. The reptile isn't on the hunt. With her sixth sense she can feel a change in the weather coming.

27:10 Only once in my lifetime - I remember as if it were yesterday - a strange, cold and white rain fell.
Snow!

27:25 Cold crept into my pores. Chrystals sharp as my thorns scratched at my vessels and waterways.

The whole ordeal lasted just a few hours, and never before had I longed so desperately for the sun.

27:42 By late morning it was over. But from that day on, around 30 years ago, I was forever changed.

28:00 In the desert, things often spring to life quite suddenly!
Bees swarmed over my lobby. Out of nowhere, hundreds, suddenly buzzing up out of the ground.

28:16 Digger bees!
Green-eyed drones comb the ground in hopes of finding a mate. They're there, somewhere, hidden in the sand!

28:32 Once they pick up a scent, there's no stopping them.

28:42 There they are: females with bright red eyes appear from below.

29:00 Not all drones get lucky, and the ones that do, get just one chance.

No time to wine and dine ...

29:21 After mating, it's time for the *females* to do some digging. They bury themselves in the sand, while the males, having given it all they've got, just turn over and die.

29:55 Only the red-eyed females still swarm, as each digs her own private tunnel, and deposits her eggs at the end of it.

30:09 When the entrances lie too close together, there are squabbles. Despite their shared mating ritual, digger bees remain solitary creatures.

- 30:20 Then, after a few days, everything return to normal. The bees disappeared as suddenly as they came.
- 30:33 And so the years went by, filled with sunshine, shade and desert winds.
- The constant underground tunneling of ants, bees and gila monsters slowly took their toll, riddling my foundations. And when the wind jostled me above, my roots ached.
- Time to think about the future...
- 31:00 It happened for the first time on a balmy spring night 150 years ago.
- 31:20 I blossomed. My flowers open only in the cool of the night. They rely on specialists...
- 31:43 For the pollination to be successful, I need help from the local nightlife -- lesser long-nosed bats.
- 31.54 The heady scent of my nectar lures them over and they dive in head-first: coating themselves in my pollen which they then carry off with them, far beyond *my* reach.
- 32:09 They've got to get on with it, for the chalice of seduction has a time limit. In just a few hours my blossoms will close.
- 32:25 But come next morning they still look stunning ...
... and my rooftop bar opens early – free nectar for all!
- 32:40 Sugar-crazy honeybees are the first to come by and take a sip. Closely followed by an armada of six-legged patrons.
- 32:52 The perfume of my flowers attracts hundreds of tiny visitors from far and wide, rejoicing at my well-stocked rooftop bar.
- 33:03 Then the big ones wake up and join the party, rushing to find a spot before it's too late, plucking and quaffing as if there were no tomorrow.
- 33.23 In return, every out-of-towner gets a load of my pollen.
At some point it becomes almost impossible to find a bee-free flagon. Before they can dip their beaks, those pesky bees have got to go!
- 34:08 Even with plenty of nectar to go around, some guests just want to hog it all for themselves
- 34:22 Collateral damage is unavoidable.
- 34:36 But at my hotel, nothing goes to waste. Even guests on the ground floor get their money's worth.
- 34.44 Anything that comes crashing down from the rooftop bar ...

34:48 ... lands right in front of the squirrels: Jackpot!

35:07 But here come other competitors.

35:14 So eat it up fast, that carpel and pollen!

35:49 The javelina are perfectly satisfied with the left-over husks!

36:00 Every year, when the monsoon comes and dark clouds cover the sky, it marks the beginning of a difficult time for me.

36:10 The desert needs water.

36:22 / need water.

36:25 But these thunderstorms are fierce and dangerous. For us plants, there's no escape.

36:40 Flash floods wash away the soil that covers my roots and anything else in their way. If you happen to be growing in the wrong place, you don't have a chance.

36:57 Once the deluge has passed, anything still standing breathes a sigh of relief.

37:06 I was lucky. My lobby was flooded...
... but my guests gained a pool!

37:37 Everyone is welcome here – day trippers too - and most of the time, peace prevails ... Until ...

37:50 This pool is mine now.
He makes that very clear.
That means you!

38:33 Curve-billed thrashers have a broad definition of „personal territory“ - and a pool in the hot desert definitely fits the bill!

38:48 Ah, but wait!

38:53 This spiny lizard has chosen the pool as his hunting ground.

39:08 Hmm, that hunter's too good for his own good!

39:15 Outta here!

39:22 Now these bees are all mine!

40:19 Pretty impressive!
Could this be the start of a beautiful friendship?

- 40:45 The pool area is now a spa for everyone.
- 41:00 But the pool party gets cut short...
- 41:10 Now it's the big guys turn...
- In these parts you'll only find water after a heavy rainfall.
But once *they've* have had their fun, there's nothing left but a mudbath.
- 41:24 So, drink first!
- 41:29 Not a hog in the world doesn't dream of a messy wallow – however tiny the tub!
- 41:39 Unbeknownst to the javalina, their bathtub has a secret drain.
My roots are some of the most powerful in the plant kingdom.
Absorbing water at high speed, sucking it up into my trunk, before it can seep away or evaporate.
- 42:09 By sunset my reserves are fully replenished:
I've got enough to keep me going for well over a year.
- 42:25 And a small puddle still remains for thirsty late night passers-by.
- 42:40 This coyote is wary of coming too close. Why?
- 42:54 An armada of red-spotted toads has occupied the basin.
- Appearing out of nowhere, this clan has gathered in the water. They've been waiting for a year between my roots.
- Now they are in ecstasy. They only have just a few nights to court, mate and lay eggs. The whole shebang!
- 43:20 Thirsty onlookers gawk and hesitate. There's a definite hint of toad-poison here.
- 43:32 Better call it a night ...
- 43:40 Bobcats may be fearless hunters, but they're no fools. He won't come anywhere near these hot-headed, cold-blooded amphibians.
- 43:59 A tactical retreat into the desert night. For a few nocturnal hours, the toads are in charge here.
- 44:12 Their time is running out though.
- 44:15 My roots are relentless, absorbing almost all water from the pool. Soon, there'll be nothing left.
- 44:30 In the monsoon season, I can take on more than a ton of water!

44:37 Perfect for a juicy harvest.

44:49 The sweet pulp of my fruit is the super-food of the Sonoran Desert.
Drawing - once again - a rash of visitors.

45:00 And so they all come: the birds and the bees, predators and prey. Nobody
can resist this last tasty temptation.

45:12 They feast and indulge ... and as a by-product, carry millions of seeds with
the juicy fruit flesh, all over the desert ...

45:30 And here the circle closes.

45:40 I spent two centuries in the most beautiful desert in the world.

45:55 But time has taken its toll.

46:05 My thorns are falling,
small cracks have become deep furrows.
Wounds that won't heal.

46:23 My life's elixir seeps away into the sand.

46:28 My guests are long gone.
My hotel silent.

46:38 Only the wind remains, incessantly buffeting my arms.

46:42 My foundation is eroded, porous.

47:30 The last pages of my memoirs are written. After two hundred years of
growing, thriving - and decay, my end comes suddenly and unequivocally.

47:50 My life passed in slow motion; as will my death. A few more years, and I'll be
history.

48:10 I was, as you humans would say, a Me'thuselah. An old cactus hotel.

48:21 My guests eroded my roots, hollowed me out and tore at my trunk.
Undoubtedly they hastened my demise,
but they also secured my legacy...

48:35 ...carrying millions upon millions of my tiny seeds out into the desert.

48:42 Perhaps some of them will share my luck, and find themselves in the shadow
of a Palo Verde tree.

Just as I once did, on a balmy spring evening over 200 years ago.

49:45 End Credits