

### The Tropical Dry Forest:

- **Biomes** -are terrestrial climax communities with wide geographic distribution.
- **Characteristics**-are the climate is a monsoon climate which several months of heavy rainfall are followed by extensive dry periods. It's always dry and it hardly rains a lot, which causes most trees to lost their leaves.
- **Climate** -lasts a few to eight months. The **organisms**, in many regions during the extensive period, many trees drop their leaves. There are few kinds of animals in the dry forest because, many of them are found in more moist tropical forests. The rainfall may be as low as 50 centimeters (20 inches) or as high as 200 centimeters (80 inches).
- **Limiting factors**- that affect the Tropical Dry Forest are the lack of the amount of species living there, the lack of water, hardly any shade to cool down. Humans overpopulate and take up space. Humans also farm or graze animals, which leaves not very much space for the few species like the black-tailed jack rabbit, california quail etc. But mostly the rhinoceros, because they take up the most area space.
- **Biotic factors**- are California quail, Black-tailed jack rabbit, Rhinoceros, white-faced coati.
- **Abiotic factors**- are the Chaparral landscape, and Tropical dry forest landscape.
- **Human impacts**-Many of the forests have a very high human population. They harvest wood for fuel, and building materials. The forests have been converted to farming or grazing the animals. They damaged a lot of the forest, because of the use of fuel being made and have animals roaming around. They take up most of the population because there isn't a lot of species around. Humans overpopulate the dry forest, which causes less area for new growing species. Humans also take away the species food supply, from being overpopulated.
- **Climate change affects**- There isn't a lot of water that comes for plants who need it. The tree start to lose their leaves, during the dry period. The lack of water limits the life and death problem for both plants and animals. Too much sunlight tends to make pluseants turn brown and begin to slowly die.
- **Biomes**- They are worth preserving because they matter in the world just like we do. The plants give humans what they need, which means they get something back in return. But in the tropical dry forest that's different because there isn't a lot of water provided for them. But also there aren't a lot of predators, which means the dry forest could overpopulate a species. That predators wouldn't

stand a chance with. But also, if the few species that lived there, wanted to cool down, they wouldn't be able to do so because there isn't a lot of leaves on the trees. Humans play the most part in this also because they take up space and they overpopulate.

## Aquatic:

### The Benthic Marine Ecosystems:

- **Biomes-** are terrestrial climax communities with wide geographic distribution.
- **Characteristics-** The temperature, in some communities like the coral reef or mangrove swamps, some areas are found warm. The coral reef exposes itself to the sunlight. It is important because they contain single-celled algae within their bodies. The algae carries on photosynthesis and provides both themselves and the coral animals with necessary for growth. The relationship between them is important the basis for a very productive community of organisms. In the mangrove swamps, the water is shallow and the wave action isn't that great. So the trees become established. The shallow water, develops a terrestrial ecosystem in what was once shallow because of the trapping of sediments and the continual extension of mangroves.
- **Limiting factors-** The lack of shallow water for the coral reef, and the lack of sunlight for the algae that needs photosynthesis.
- **Biotic factors-** Plants found are: sponges, seaweed, kelp, mangrove trees, sea urchins, and sea grasses. Animals found are: fish, clams, oysters, various crustaceans, plankton, burrowing worms, crabs and jellyfish.
- **Abiotic factors-** Mud, sunlight, oxygen.
- **Human impacts-** Overfishing has destroyed many of the traditional fishing industries of the world. Fish farming results in the addition of nutrients and has caused diseases to spread from spread species to wild fish. The transportation in the oceans, results in oil pollution and trash regularly floating onto the shore.
- **Climate change affects-** There isn't a lot of shallow water in the coral reef. The coral reef requires the water to be warm, so it can be found near the equator. The saltiness from the shallow water changes the estuary with tides and the flow of water from rivers.
- **Biomes-** They are worth preserving because those are small lives and resources that humans use to eat. Other animals that live there feed off of living organisms. Human overfish or farm fish in shallow or freshwaters.