Invasive Species: The Prickly Pear

What is an invasive species?

An invasive species is a species that has been moved from its native home to a new location. They tend to populate large areas at rapid rates and often treats to the flow of food webs and biodiversity. They cause populations of native animals and plants to decrease and create weak ecosystems.

The Prickly Pear

The prickly pear is a species of cacti that was brought over to Australia with the First Fleet. They were originally intended to be a host plant for cochineal beetles but the cacti spread and now covers 22 million acres of land. Both breeds of the plant (drooping and erect) are classified as a weed and are illegal in some areas.

Before the introduction of the Prickly Pear, many regions of Australia had a much richer biodiversity. Australia has thousands of native plants that flourish in the specific climate and soil. Ecosystems in Australia thrive because the indigenous plants and animals that live together and create rich biodiversity. Biodiversity is immensely important for an ecosystem. It enhances the productivity of an ecosystem which is important if endangered animals like the Stick Nest Rat and certain species of wallaby are to survive.

Prickly Pears can grow from dropped off segments because of this they tend to grow in rather thick patches. These patches are areas of weak biodiversity which affects the quality of the soil. If the soil is low in nutrients then there is a low chance that other plants will be able to grow in that soil.

Environments in South Australia are feared to never recover from the damage invasive plants like Wheel cactus and Prickly Pears have caused. If environments can’t recover from a lack of biodiversity that affects the smallest of things. But even they are important, take nutrients in the soil for example. A lack of nutrients threatens native plants. If a plant species’ population decreases or becomes extinct animals lose their food source or home. Either the animals starve or move into a different area which can cause overpopulation in the area and a decline of resources. Both events cause massive disturbances in the food web.

Thickets of these cacti also act as a refuge for other invasive pests like foxes and rabbits. The fruit that the plant produces is a food source for the fruit fly which is also a pest.

Another problem is the spines of the cactus, they are a serious hazard to wildlife especially those that graze. The spines are not extremely sharp but will get stuck in whatever they come in contact with. The mouths of animals is the most dangerous place for the spines to get stuck but even in the skin they are a problem. They are difficult and painful to remove and animals can’t remove them on their own. If spines are caught in or damage an animal's mouth such as a wallaby, the wallaby may have trouble eating if it can eat at all. This leads to starvation and death.

While there are things being done to try and eradicate the Prickly Pear it is not easy. The cacti germinate all year round and the two types (drooping and erect) seeding seasons are at opposite times of the year so the plants are always spreading. The government has made growing the cacti illegal in some states and areas where either the Prickly Pear has caused severe damage or in hopes to prevent it from damaging biodiverse land like national parks.

However the only way to terminate the plant is by physically removing it. This may involve cultivation of the land or pulling them out of a heavily affected area.

Introduced threats can damage the flow of food webs, resulting in mass population decrease, poor biodiversity and weak ecosystems.