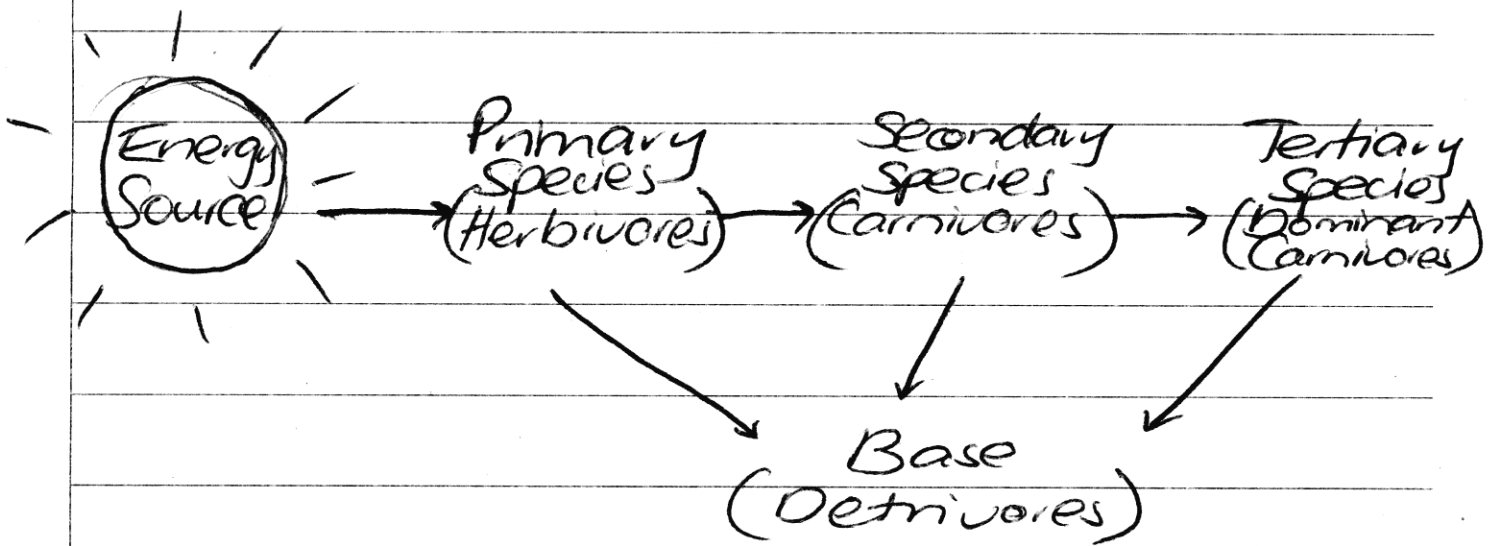
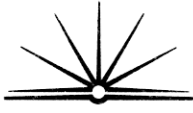




An Ecosystem is a diverse & vulnerable system consisting of the relationships between flora, fauna & humans. The ecosystem begins with a species followed by a community → Population → Ecosystem, & the ecosphere where various ecosystems play are part in the whole world's functioning.



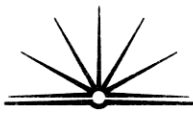
This diagram is a basic idea of how an ecosystem works. It is evident from this if there happen were to be a problem with the Primary Species this in turn would effect the rest of the chain which could, in the long run, extinguish



the rest of the species & there would be no ecosystem. These effects on a ~~the more~~ species could be either natural, or human-induced or both.

These interactions & changes can be seen in the Mangrove Ecosystem. The particular site Toura Point is abundant with flora & fauna that are dependent on each other. The *Avicennia Marina* (Grey Mangrove) is the dominant species of the site. Here the Mangrove is home & haven to marine life of prawns, fish, molluscs. It is sheltered away from the waves & wind, which is why it is the breeding grounds for many marine animals. It is an important role & basis for other ecosystems such as coastal & ocean.

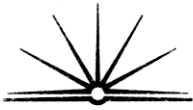
The Grey mangrove has adapted over time to the conditions it lives in. The intricate system it operates in is evident



of why it is so important. The high salinity & low oxygen that the Mangrove lives in shows how specialised this ecosystem is. The salt secreting leaves & the pneumatophores that provide oxygen to the plant are part of the species adaptation.

Not only is this ecosystem important to native fauna but also international migratory birds. Over 30 birds fly migrate to Towra Point throughout the year, the reason why international conservationists have taken interest in preserving this site. JAMBA (Japanese Australia Migratory Bird Assoc.) & CAMBA, (China's version) & the RAMSAR convention are associations that help preserve this vulnerable & important site.

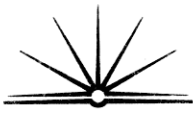
Towra Point consists of 600ha, 2/3 of being Mangrove. Surrounding this



site are the Oil Refinery, Botany Bay Shipping terminal, & is 16km away from the centre of Sydney's CBD. These impacts on the biophysical environment can be dramatic. The more specialised an ecosystem is, the more vulnerable, susceptible it is to change.

Another form of change that shows how important this diverse ecosystems functioning is, are the oyster leases that are close to the Mangrove. Here the oysters ~~also~~ absorb the nutrients that the Mangroves & spawn need for their development. This effects the functioning which creates the ecosystem to break down.

Throughout the study of Towra Point it has come to my attention that this ~~ecosystem~~<sup>Site</sup> plays an integral



part in not only the functioning of ~~the~~ <sup>mangrove</sup> but other interrelated ecosystems.

Therefore it is important to understand that for ~~the~~ ecosystems to survive, ~~education~~ <sup>is</sup> ~~wise to undertake~~ maintaining them is the upmost importance.