

Vertebrate Fauna Survey Coverage



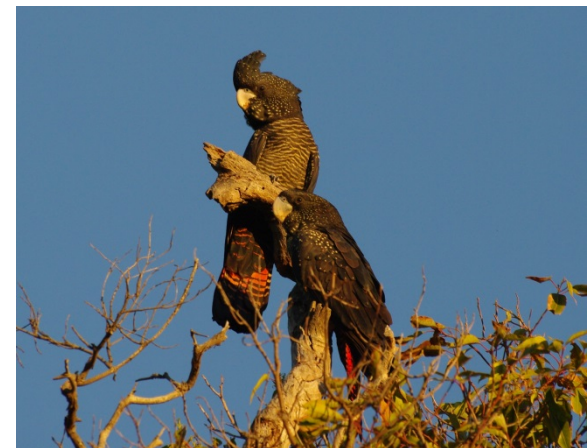
GHD Environment
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Aim Talk direction

Explain the process of **site selection** and **survey coverage** when conducting surveys in a variety of habitats based on region, project size and shape.

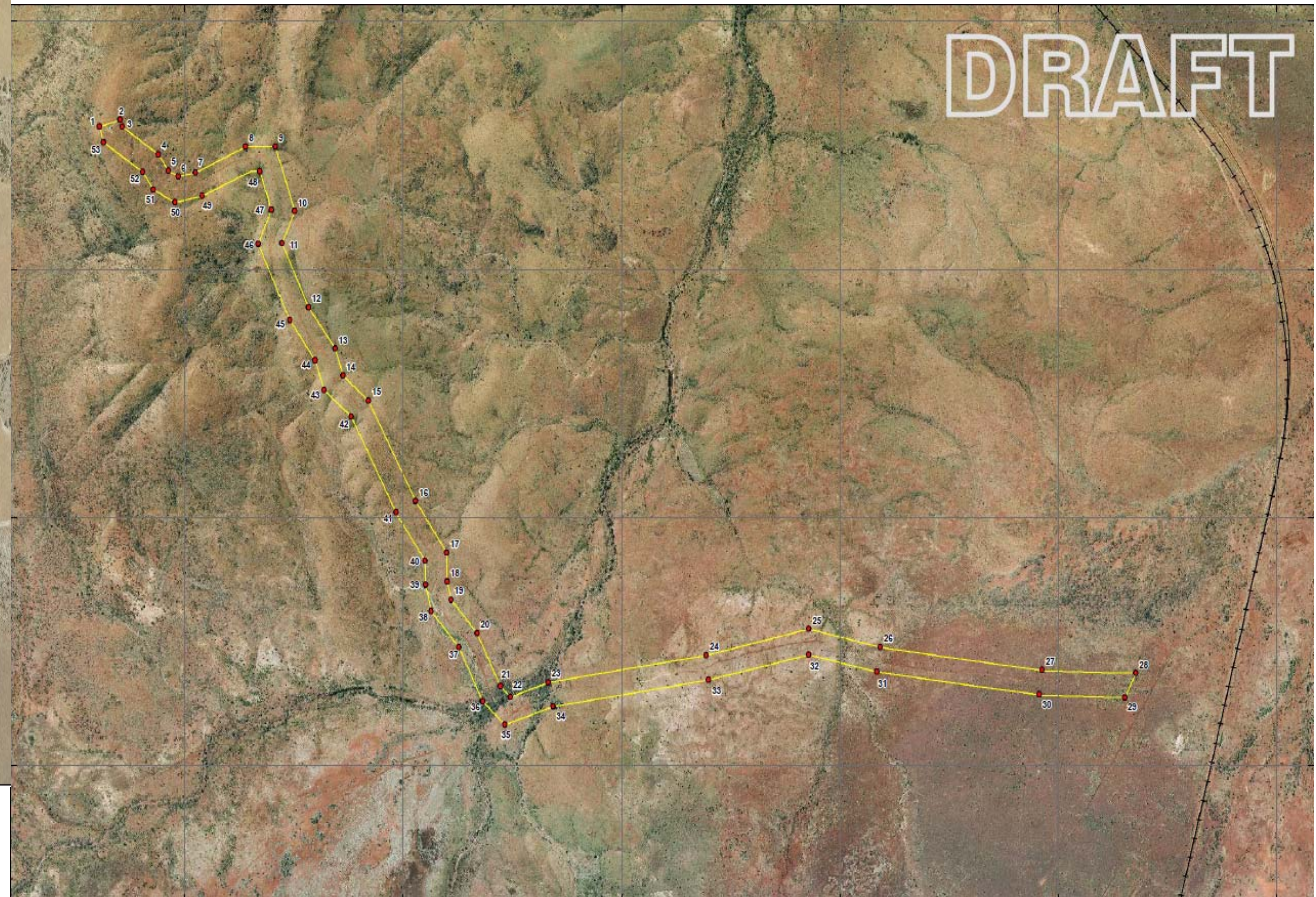
Pre-survey planning for site selection.

- Linear corridors
- Polygons
- Disjunct areas
- Remnants (includes island)



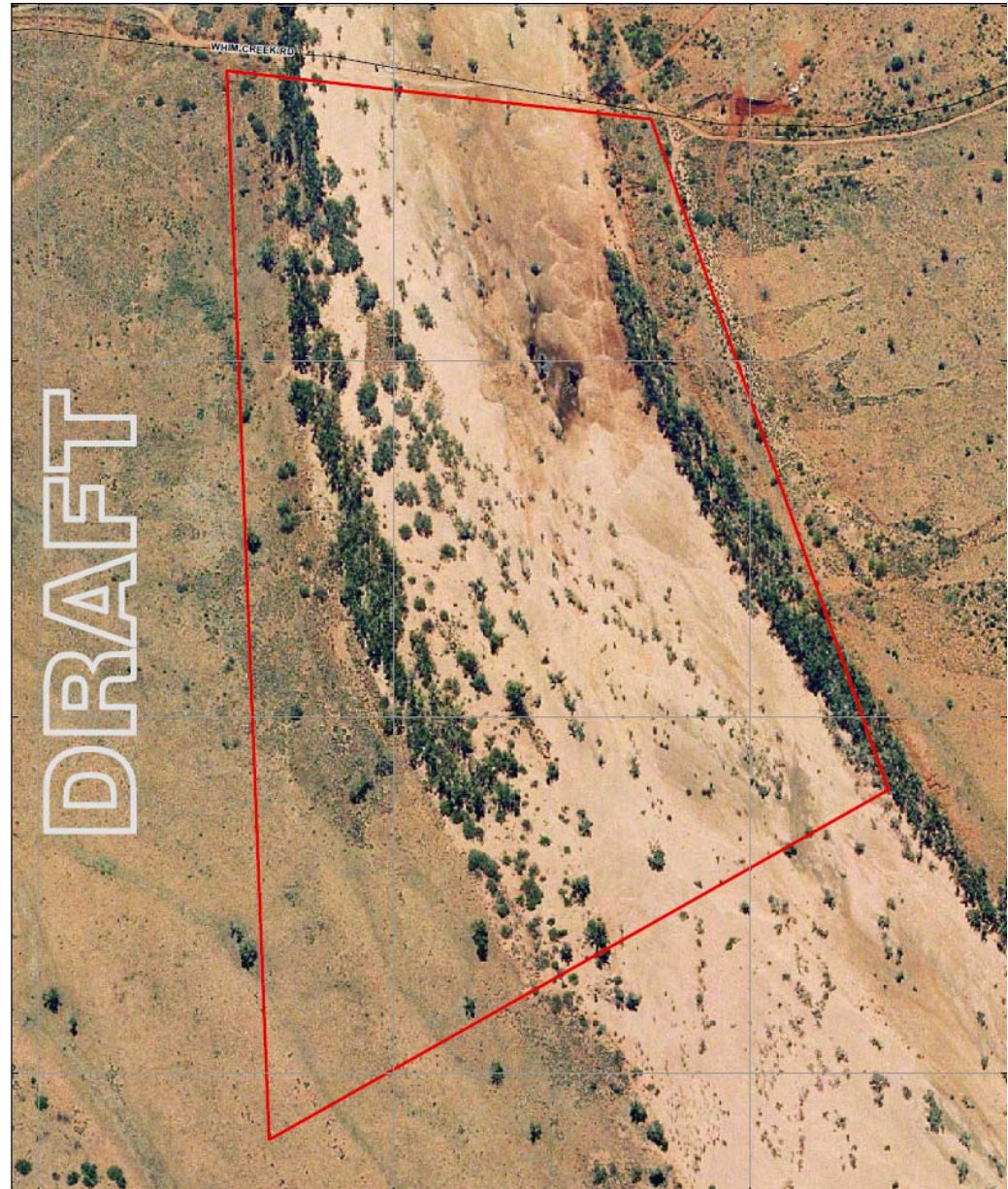
Linear Corridors

- Linear corridors vary greatly in size and type, a road, rail, pipeline or power easement.
- The impact is going to vary between these types and therefore may affect the way sites are selected and coverage determined.



Polygons

- Can be assessed for a multitude of reasons and each project will vary in assessment.
- In this case the survey area is dominated by a major river bed with supportive environments.
- Sites selection involves sampling river bed, water body, riparian zones, dunes and plain.
- What uses the water body? – species may fly in.
- Seasonal use – migratory species



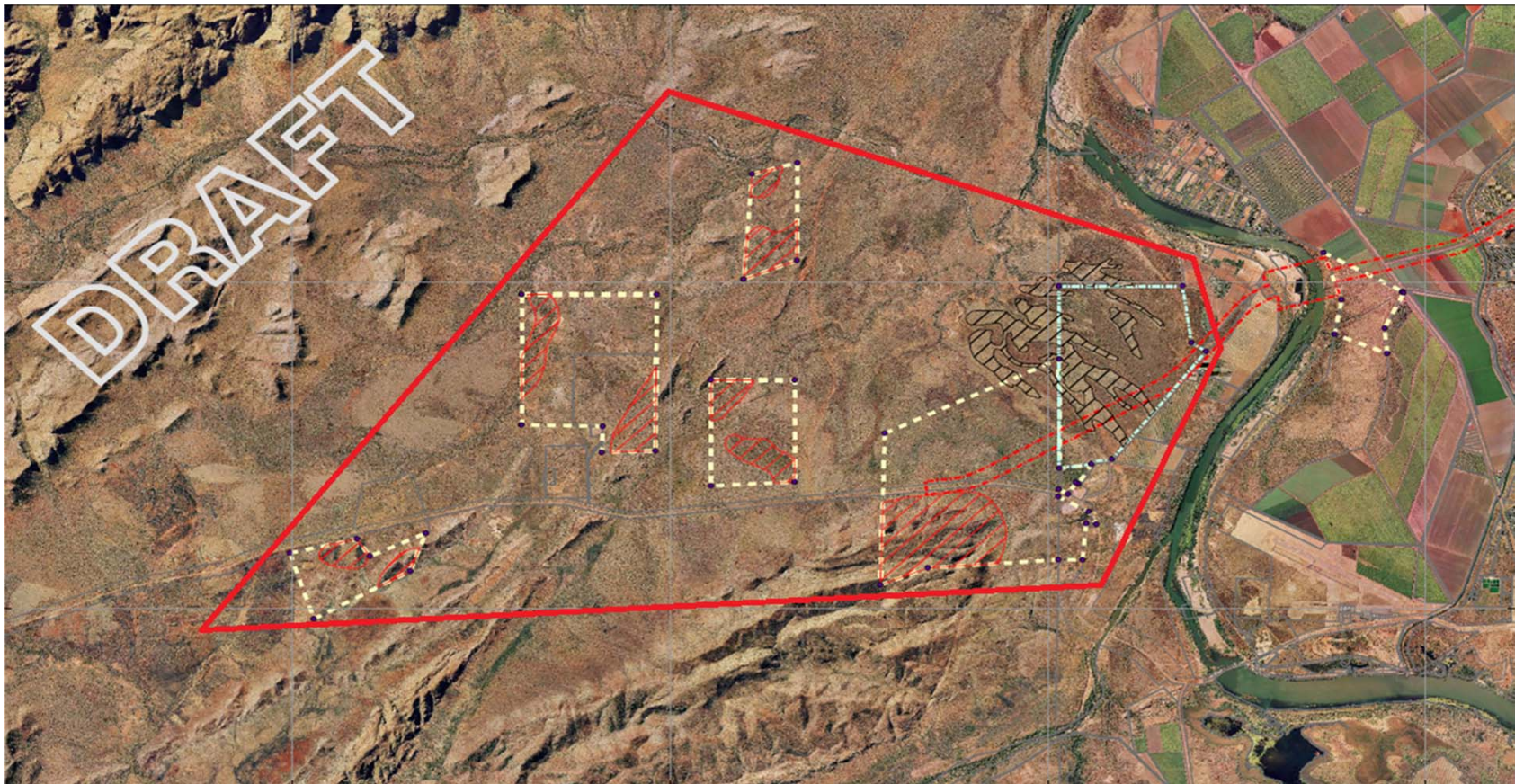
Polygon

- A more homogenous site with subtle changes in the environment but still has clay plan, plain and shrublands.
- Maybe within a ecotone.



Disjunct Areas

- Consists of two or more polygons within a general area
- During site selection we need to consider if we treat the survey area as separate units or survey a much larger polygon
- In this case numerous locations have had previous targeted surveys and could be taken into account during site selection and coverage



Remnant

- Often an island in the landscape.
- Depending on size may dictate effort and selection of sites – targeted assessments maybe more relevant.



Large diverse areas

- Large survey areas (15 km x 3 km) with multiple environments
- The use of a level 1 survey or simply a 2/3 day inspection greatly assists in selection.

Site selection would include;

- Covering multiple habitat types
- Targeting species
- Site positioning, maybe significant i.e. in relation to aspect in the environment



Islands

- Sites can be selected both randomly and selective in this case the island is mostly homogenous with pockets of habitat like dunes, vine thickets, deep valley.
- However difficult to access.
- Previously disturbed areas present with existing environmental impacts



In Concluding

- Site selection will vary between survey areas.
- Experience of personnel deciding on site selection and coverage of survey area is very important.
- Utilise Level 1 assessments and/or a preliminary visit to a new area to assist in site selection and survey coverage.
- Understand the proposed project and the impacts to the environment, it greatly assists in the understanding of potential impacts to fauna and how these can be reduced or mitigated.





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