

1.1 Zonation

1.1.1 Background

The aim of this activity is to record and photograph the locations of transitions between different zones of the sand dune system to monitor how these boundaries are changing over time. Transitions are the abrupt or gradual change of habitat from one type to another. Monitoring is likely to focus on some of the following: mobile dune transitions to semi-fixed or to fixed dunes, the extent of bare sand around newly restored/scraped areas or blowouts, scrub encroachment or the transition from dune slack vegetation to drier habitats.

1.1.2 Method

When and where to survey

Zonation surveys are carried out once a year, in April or May, along the fixed transect routes that have been selected at your site. It will take roughly take between 1 to 3 hours per transect.

Equipment

Take with you:

- Handheld GPS unit
- Mobile phone app - transect locations downloaded beforehand
- Compass
- Long tape measure (ideally 50 m or more)
- Marker canes with high visibility tape/ribbon (suggested minimum 3)
- Transect description for the transect you intend to walk
- Zonation recording form
- Sand dune zone guide
- Camera

Navigating to and along the transect

- a) Using your handheld GPS (and mobile phone app), navigate to the first point of the transect, which will be marked by a post. The grid reference can be found on the transect description form, or the start point described on the app.
- b) Use the grid reference for the end of the transect and your compass (and your mobile phone app) to navigate along the transect. The 3 marker canes can help you keep to the transect. Place the first marker cane at the start point. Following the bearing provided for the transect, navigate along the transect roughly 50 metres & place the second marker cane. A person sited at the first marker cane, holding the compass can then direct the location of the third marker cane to be placed 50m further down the transect. When all 3 canes are aligned, walk back to the first cane and start recording the transitions. The first cane can then be re-located further along, aligning with the other two canes to maintain your bearing and the process repeated to move down the transect.

Some transects may be shorter than 100m. Adjust the method if required to maintain line of sight between marker canes. For transects ending at the beach, the last point will be on the beach itself.

- c) Use the tape measure to measure the distance between locations, and record the distance between zonation transition points.

What to record along the transect

- a) As you walk along the transect, use the sand dune zone guide to assess which zone you are in. When you move from one zone to another, record the grid reference from your GPS (if using the manual recording form), along with the names of the zones you are moving between. The app will guide you through this when you enter a new transition point.
- b) Record the distance from the last transition point, in metres and to the nearest 10 cm.
- c) At each transition point, take two photographs perpendicular to the direction of the transect (one to the left, and one to the right). On the manual recording form, note down the time that these photographs were taken so that they can be identified and stored correctly. On the app, the time of photos will be recorded automatically.
- d) Notes:

- The transition between different zones may not be clear cut but you should record the point at which you feel the dominance of characteristics has shifted from one zone type to another.

-You may also transition from one zone to another and then back again – each transition should be recorded on the form. Anything larger than 2 metres can be considered a new zone.

-On very loose sand on a steep dune, it may be necessary to walk a few metres away from the direct line to avoid disturbing the dune, but track back to the direct line to take the next measurement.

-The end point for some transects may be a scrub or woodland boundary – in this case, measure to where the scrub/woodland forms a fairly unbroken line (not individual bushes or trees)

-The end point of the transect for transects leading onto the shore should be approximately 5 m seawards from the last vegetation you see (but be aware of steep eroded dune edges – if access is difficult just record this edge)

