

Natural shade

Vegetation should be the first choice for Ultraviolet Radiation (UVR) protective shade. Where possible, retain existing mature vegetation for shade as new planting takes time to establish.

This list of considerations is useful to assess existing shade or as a guide in new design.

Existing vegetation

Consider the following when assessing the suitability of existing vegetation, and planning how to incorporate this into your future plans.

Foliage density

- Assess shadow pattern for density of shade. Is it sparse/moderate/high?

Canopy shape

Choose trees that have the canopy shape that most suits the needs of the location:

- Wide spread canopy for large areas needing overhead protection
- Tall conical canopy is suitable for cast shade
- High round canopy is suitable for cast shade.

Canopy height

Does the proposed canopy height provide:

- Edge height as low as possible for overhead shade?
- Appropriate length of shadow cast in various seasons?

Seasonal variation

- Select a mix of deciduous/evergreen species to achieve maximum shade benefit.

Maturity of existing vegetation

- Are the plants mature? Account for the effect of fully-established vegetation in your plan.
- Provide temporary shade in the interim as vegetation matures.

Additional shade

- Complement vegetation with additional planting or structures to improve UVR protection.

Proposed vegetation

Are the proposed species:

- Suitable to location?

- Suitable to type of shade required e.g. cast/overhead/side barrier/surface application?
- Seasonally appropriate?
- Low maintenance? e.g. native ground cover rather than grass.

Does the planting plan:

- Provide an arrangement to ensure continuity of overhead and side cover? e.g. do canopies overlap, are trees planted in groves?
- Allow access to the deepest areas of shade beneath canopies? e.g. avoid garden beds around tree trunks to allow people to use deeper areas of canopy.

Consider maintenance:

Have you:

- Factored in protection against vandalism and destruction of vegetation?
- Devised and undertaken a maintenance schedule?

Source: **Queensland Health (1997) *Shade for Sports Fields - Planning Sun-safe Outdoor Environments in Queensland*, pg 101-106.**