## CREATE A TURTLE FRIENDLY CHRISTMAS LIGHTS DISPLAY



The nesting and hatching season for endangered loggerhead turtles runs from October to March, and Christmas festivities fall right in the middle of this period. Turtles are impacted by artificial light but there are some simple ways to help you create turtle-friendly Christmas lights displays.

Adult turtles are impacted by the direct sight of lights. When light sources are visible, turtles looking for a nest site may turn-around to find an alternative nest site, and if a suitable nest site cannot be found they may release their eggs into the ocean, losing their entire clutch - which may be about 125 eggs. Maintaining dark beaches is a good way to encourage turtles to nest.

Hatchling turtles are also impacted by artificial light. Light we produce can mis-orientate hatchling turtles as they search for the ocean, instead causing them to move towards the glow of light above the city. Mis-orientated hatchlings are subject to increased predation from animals, and an increased risk of being run over by vehicles, cyclists and pedestrians. Too much sky glow reduces the chance of survival for hatchling turtles.

It is important to use the right coloured lights in your Christmas displays. Loggerhead turtles are more sensitive to white and blue coloured light, and blue and purple light scatters more in the atmosphere, increasing sky glow. Yellow, amber and red light sources will produce less sky glow and less impact on loggerhead turtles.

Other factors which increase sky glow include surface reflections, high intensity sources, light sources which emit light in most directions, and the duration of operation.

## Use the following guide for your Christmas lights display:

- Aim to create Christmas light features, rather than creating as much light as possible.
- Use yellow, amber and red lights, and avoid white, blue, violet and UV lights.
- Use controls to limit the duration and intensity of light:
  - Purchase low intensity lights with dimmers, and dim lights to their lowest output
  - Use flashing lights to reduce the total time the lights are on.
  - Limit the duration of use from 6pm to 9pm.
- Minimise spill light and sky glow:
  - Install lights as close to the ground as possible, and aim light sources towards the ground.
  - Avoid the use of roof-mounted lights.
  - Minimise the use of sources which emit light in all directions.
  - Minimise reflections by using dark coloured back-drops and floor coverings.
  - Avoid illuminating light-coloured walls and large areas.
  - Use screening (vegetation, buildings or other objects) to contain as much of the light on your property.

Thank you for helping protect the loggerhead turtles of Fraser Coast during the festive season.

