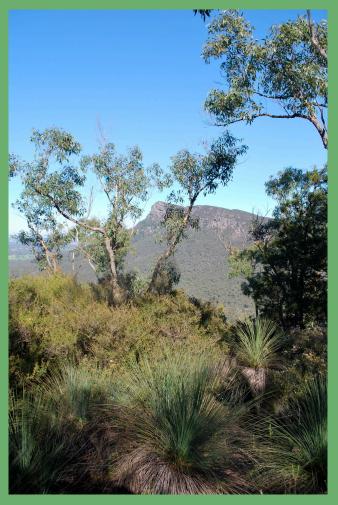
## Where are the wild lawyers of the future? Nature-deficit-disorder and it's impact on children



"What they do not know, they will not protect, and what they do not protect, they will lose"





•Today, 90% of a child's time in the US is spent indoors.

\*Children are spending just 4-7 minutes outside each day in unstructured play.





•The average American child spends more than 7 hours a day in front of a screen.

\*Australian children spend a MINIMUM of 4 hours a day in front of a screen.





#### **Urbanisation and modern societies**

• For over 99% of our history, humans have led nomadic or agrarian lifestyles in natural habitats.

• By 2020, up to 70% of the earth's population will be living in urban environments, cities.

 This shift of people away from rural areas to cities, coupled with our modern lifestyles, has led to an unprecedented disengagement with nature.

#### Why humans need nature

- \* Nature is the ultimate foundation of life and health.
- \* Impacts of ecosystem degradation.
- \* Impacts of environmental deprivation.





## UN Millennium Ecosystem Assessment

Biodiversity is declining across the globe.

Nearly two thirds of the critical services
 nature provides to humans are in decline, and
 we face even greater loss of biodiversity over
 the next 50 years.

## The importance of nature to children

Nature connection is vital to a child's health.

 Within the space of a few decades, the way children understand and experience nature has changed radically.

 "Nature-deficit-disorder" – term coined by Richard Louv, author of "The Last Child in the Woods".

#### The importance of the nature connection to children

- \* Physical health
- \* Cognitive development
- \* Mental and emotional health



# What are the causes of nature-deficit-disorder in children?

- Modern society is increasingly structured to prevent children from direct experiences in nature.
- Physical contact with nature has diminished.
- Screen time.
- Parental fear of traffic, bullying, pedophiles, crime etc.
- Urban infill of natural play spaces.
- Highly designed, synthetic, "safe", play spaces.
- Decline in big backyards.
- Over-scheduling of children with extracurricular activities.

## Impact of nature-deficit-disorder

- Health and wellbeing impacts.
- Extinction of experience.
- Role as future leaders and policy makers.
- Role as Earth Stewards:
  - What they do not know, they will not value and what they do not value, they will not protect.
  - Nature needs children and children need nature.

# Ideas to re-connect children with nature





## Examples of DENR projects addressing the importance of the "nature connection"

- Addressing impacts of nature-deficit-disorder in children
  - Belair National Park Nature Discovery Precinct

- Engaging the community with nature through promotion of health benefits
  - Nature-based Volunteering
  - Adelaide Botanic Garden's Garden of Health

### No Child Left Inside Act 2011

- On 14 July 2011, the No Child Left Inside Act was introduced into the US Congress.
- Bi-partisan legislation.
- "Environmental education must be a part of the formal pre-K-12 education system if we are to fully prepare students to become lifelong stewards of our natural resources and compete in a green economy," - Congressman John Sarbanes, one of the sponsors of the bill

### Leave no child inside movement

#### California Children's Outdoor Bill of Rights

- Every child should have the opportunity to:
- Discover California's Past
- Splash in the water
- Play in a safe place
- Camp under the stars
- Explore nature
- Learn to swim
- Play on a team
- Follow a trail
- Catch a fish
- Celebrate their heritage

## Thanks!

