

# Australia - an Ancient, Delicate, and Unique Environment

## Power-Point Presentation by Donna Langley-Peck

### 2006 Fulbright-Hays Seminar Abroad

1. Uluru from the air - "Terra Australis" - Southern Land
2. 200 million years ago - separated from other continents  
Plants and animals different from other parts of the world - 80% exists nowhere else  
100,000 insect species - 1/3 unknown to science - 80% spiders unknown  
1969 geologists found woman's skeleton on shores of dried lake in Mungo NSW  
60,000 years ago ancestors traveled from South East Asia - island to island  
Many different languages - groups  
Aborigines - oldest continuous maintained culture - language, art, belief systems  
Between 45,000 and 60,000 years old - Aborigine means "Native"  
Smallest continent - largest inhabited island - only Country also a continent  
AU has the oldest objects, most ancient rocks and fossils  
Earliest animal tracks and river beds - coral reefs/deserts/mts./forests/fertile plains  
Tropical rainforests - Temperate - Sub Tropical - Literal(has many endangered species)  
Flattest "Flat as a cracker" ("Mt. Kosciusco"- 7,310' above - Lake Eyre - 52' feet below)
3. 3 million square miles - almost as big as U.S.  
AU 19 million people - U.S. 279 million people  
AU 52 largest nation in the world - pop. U.S. 76 per sq. mile - AU 6 per square mile.  
6 states - ACT - Northern territory (will become state when pop. increases)  
Major highways show - 80% of people live along the coast - Route 1 rings AU
4. 1606 - Spanish explorer - William Jansz sailed by AU  
Dutch saw AU on way to Java (Indonesia) called it New Holland  
1770 - Captain James Cook British Navy landed on Botany Bay - claimed for England  
Sailed on ship "Endeavor" - named Botany Bay for Botanist Joseph Banks  
Reminded him of South Wales - called it "New South Wales"
5. View of Sydney from Taronga Zoo - Oldest City - largest population - 1/5 population of AU  
Named Sydney after Thomas Townsend - First Baron of Sydney  
1st group of 730 convicts arrived - 270 guards /sailors  
Botany Bay not suitable because of sand flies/marsh/dangerous anchorage  
January 26, 1788 - Capt. Arthur Phillip landed on Circular Quay - called "The Rocks"  
Britain thinned out underclass by sending small time thieves to AU  
Stealing trifles/12 cucumber plants/stealing a book - 1700's Britain hanged for 200 acts  
Convicts crammed below ship - disease - filthy conditions - many convicts died  
8 months journey - 15 thousand miles of sea - 2 year wait for news from Europe  
Criminals had a 7 year sentence - no provisions to return - "life sentence"
6. Taronga Zoo - Kangaroo - marsupial carries "Joey" in pouch - 45 macropods "Big Foot"  
Eats grasses and leaves at night - tail used for balance - newborn 1" long-  
Roos more common than before Europeans came due to improvements in grasslands,  
rural areas, and ponds.

7. Wombat - marsupial - burrows - eats grasses/roots/herbs
8. Tasmanian Devil - marsupial - early settlers named it because of piercing scream  
Hunts possums, wallabies, and wombats - finds and eats dead animals  
Eats all parts with powerful jaws and sharp teeth
9. Echidna - spiny anteater - rolls into ball if attacked - monotreme/only mammal that lays eggs  
Platypus is the only other monotreme - they give birth and excrete in same duct opening
10. Shingleback Lizard - skink - "Trevor" - their head and bum look alike to fool predators  
Digs in head and scales on side of head collect water to mouth (rescued at customs)  
More lizard species live in AU than anywhere else
11. Ringtail Possum "Raven" - was attacked by ravens as a baby and rescued
12. Diamond Python - bushland and park areas around Sydney - painful non-venomous bite
13. Black Funnel Web Spider - lives around Sydney and Eastern AU  
Most poisonous - has highly toxic fast acting venom - female 8X more poisonous  
Short curved fangs - spider rears up and stabs down  
Too poisonous to show at museums  
Redback spider - All over AU - is related to Black widow - needle-like fangs  
Female bites hundreds of people a year - only 30% need anti-venom
14. Manly Bay - Lifesaving Stations/Club - founded 1903 - swimming - surfing  
Rescue boats - set up flags and shark/jelly fish nets for safest swimming  
Young life savers called "Nippers" - large lifesaving competitions
15. Life-saving club lifeguards demonstration - social and rescue facility
16. Gibberagong Educational Environmental Center - student programs  
Ku-ring-gai Chase National Park - Bobbin Head - student environmental programs
17. Wollemi Pines - thought extinct - found in 1994  
25,000 species of plants - 1/3 never named or studied - 87% don't grow elsewhere  
Fauna abundance - poor soil drives specialization - isolated life forms developed over time
18. Royal National Park - Bungoon Trail - 1789 - 2<sup>nd</sup> largest park in world (1st Yellowstone)  
Sandstone plateau -1910-15 stopped logging - red cedars returning - eagles  
Many Aborigines killed by diseases (chicken pox/small pox/flu) from Sydney area  
1788 - 300,000 to a million Aborigines - end of 1800s - 60,000  
Early 1800s English Law not crime killing Aborigines - 20,000 intentionally killed by whites  
"Inflict such punishment as they may merit" - laws changed after 1928  
1838 - outrage from activists - 1st time - 7 men executed for killing Aborigines
19. Canberra - planned city built in 1927 between Sydney and Melbourne  
ACT - Australian Capital Territory - Aboriginal name for "Meeting Place"  
Parliament House 1988 - designed like a time line - \$1.1 billion - most expensive in AU  
Built on top of hill - roof grassed over - 4,700 rooms - 2,416 clocks used for voting  
Flag size of double decker bus - built on a fault line - occasional tremors
20. 48 Italian gray marble columns depict eucalyptus trees  
Institutions blend of British and American government - Parliament - British Term  
Chambers of House of Representatives and Senate - American terms  
January 1, 1901 - Independence from Britain - Colonies federated

- "Commonwealth" Prime Minister- still honor Queen of England as Monarch  
 Issues - whaling rights/Japanese - sustainability - Aboriginal issues - trade -security
21. Aboriginal Treaty - Constitution Act 1982 - Aborigines 1.5% of AU population  
 Past 20 years restored large land tracts - returned Uluru - \$ for schools/clinics  
 Community projects/small businesses - only 2 Aborigines have served in Parliament  
 No AU citizenship existed until 1949 - Whites were considered Britains before that  
 After WW11 population from 7 to 18 million most multi-cultural- Europeans, Greece, Italy  
 White Australian Policy made to keep out "Undesirables"  
 "Stolen Generation" - 1910 - 1970 - 1/10 & 1/3 Aboriginal children taken from parents  
 Foster homes/State Truancy Camps until 16/17 - prepare for rewarding life in white world  
 Until 1960 in most AU states - Aboriginal parents didn't have legal custody of children  
 Believed that parents would soon forget offspring and were immune to normal emotions
  22. Australian War Memorial - AU one country that has been in every major war with us  
 Exhibits - WW1 - WW11 - Australia and New Zealand Army Corps (ANZAC)  
 ANZAC Day April 25<sup>th</sup> to commemorate WW1 Battle of Gallipoli in Turkey  
 WW11 - Japanese got close and captured most of Solomon Islands and part New Guinea  
 AU defended its main cities - 3 Japanese mini-sub and 2 planes attacked Sydney Harbor  
 After Battle of Midway the battle moved elsewhere - AU was relieved  
 AU realized - couldn't count on Britain and vulnerable to unstable countries to north  
 Darwin (Northern Territory) - strong Armed Forces contingent stationed - airport  
     In 1920s-40s took 12 days - 42 refueling stops - 5 changes of aircraft  
     Train through Italy - Mussolini wouldn't allow flights over Italian airspace  
     Dust storms - monsoons - mechanical failures - Bedouin potshots - occasional crashes
  23. National Library of Australia - Capt. Cooks Diary - shown 1X weekly by appointment  
 Purchased in 1923 by AU government for 5,000 pounds at Sotheby's Auction  
 National Gallery - Aboriginal Art Exhibitions  
 The National Museum of Australia - Australian history - hands on programs
  24. Captain James Cook's artifacts - journal entry about Aborigines: "They may appear to some to be the most wretched people on earth, but in reality they are far more happier than we Europeans. They live in tranquility which is not disturbed by the inequality of condition. The Earth and the sea of their own accord furnish them with all things necessary for life. They seemed to set no value upon anything we give them, nor would they ever part with anything of their own. All they seem to want is for us to be gone."
  25. Convict's uniform called a "Magpie" - worn as secondary punishment for repeat offenders
  26. Birrigai Outdoor Educational Center - Aboriginal for "Laughter"  
     Tuggeranong Valley sheep grazing country - Brindabilla Mountain Range  
     2003 bush fire damaged all but 3 buildings - bush fires - AU driest Continent - lightning  
     Eucalyptus leaf oils flame - leaves regenerate from buds under bark - seeds regenerate
  27. Run by Department of Education - 8 teachers - 3 day camp with about 60 students
  28. Wild Kangaroos in a "Mob" very tame
  29. Kangaroo poop
  30. Tea Tree - Eucalyptus - "Tea Tree Oil" lotions/cosmetics - named by Botanist Joseph Banks
  31. Banksias - Named after Botanist Joseph Banks - 1<sup>st</sup> species collected - seed cones

- AU home to 2,700 foreign weeds - worst offenders Botanical Gardens  
Darwin's Botanical Gardens had 3 weeds escape that now threaten Kakadu National Park
32. American Embassy in Canberra - built in Colonial Williamsburg style  
Met William Stanton - "Charge d'Affaires" - many presidents have planted trees there  
Each embassy is built in their native style and architecture
33. Holbrook Land Care Management - 1988 catchment of farmers to look after farms  
Plant trees and wildlife for the birds - 80% farmers participate - 2 million in funding  
Band birds - measurements/evaluate for growth and statistics  
Least wood continent (except Antarctica) - largest exporter of woodchips (monitored)
34. Ridged metal slab - to study what snakes, spiders and animals nest under it  
Thomas Austin - 1859 brings 24 wild rabbits from England to Victoria AU for hunting  
1880 - 2 million acres of Victoria land was picked clean.  
1901 - Rabbit-proof fence built - 1,833 miles long in Western AU  
1890-1900 10 year drought - top soil dried up - blew away - thinnest top soil in world  
Outback - plenty underground water - too salty to drink/water plants - OK for cattle/sheep
35. Charles Sturt University - Thurgoona Campus - Environmental Science - 3 yr. programs  
Captain Charles Sturt - expeditions 1828-45 - charted course for Murray River  
200 acres - solar panels - all recycled materials (glass, wood, metal) - no paints used  
Water caught in tanks to heat walls - turrets open automatically according to heat/cold
36. Composting toilets - clean and effective - other views of campus
37. Albury/Wodonga - "Burraja" Indigenous Cultural and Environmental Discovery Center  
Brendan Kennedy - Cober tribe "Stone Country People" New South Wales  
Museum programs - taught didgeridoo playing, stone cutting, and spear throwing
38. Birrumbuttock Public School - Wirramina Environmental Education Center  
Was a cattle drive herding route - During visit officially in worst drought in 100 years
39. Owen Dunlap - Head and teacher - 36 students K-6 - computers - even learn Chinese  
Hosts 2,000 students and many guests yearly - model environmental school
40. Xavier High School - Albury - 780 students in years 7 - 12 - \$2,000 yearly tuition  
1951 - Outback - School of the Air - 140 pupils k-7 - few Aborigines - telecommunications
41. Faculty communal workspace and desks - laptops
42. Student studying water pollution unit - looking up Pete Seeger's Hudson River Songs
43. Milawa Gourmet Region (custards, wine, and cheese) - Brown Brother's Winery
44. Healesville Sanctuary - Wildlife Health Center
45. Animal hospital - Visitors can watch operations and autopsies
46. Kangaroos - more common than before Europeans - improvements in grasslands/rural areas  
130 marsupials threatened - 16 extinct - largest killer - 12 million feral cats  
Marsupials are nocturnal - people don't notice their decreasing numbers
47. Koala with baby - sleeps 20 hours a day - eat eucalyptus leaves - get water from trees  
Only move to find another tree - gum tree - white reflects heat - leaves dangle from sun
48. Baby Koala - marsupial pouch faces backwards - development threatening koalas
49. Melbourne - garden state Murray River - irrigates wheat - rice - fruit - wineries  
Bushland - rich soil - dairy and sheep farmers - wool
50. Queen Victoria Market - sells everything in market stalls - fresh foods/art/clothing

- Bananas \$14.99 a pound due to cyclone damage in Northern Territory
51. CERES Community Environment Park - rubbish dump called "Brunswick Tip"  
Working model of a sustainable community - education programs  
Environmental technologies and management practices - café from home grown foods
  52. Windmill - chair from tires - sculpture from bicycle wheels - grow food eaten at café
  53. Fulbright reception at "Post Mao's Café" - China Town - Mao ZeDong's favorite recipes  
92 year old owner cooked for Chairman Mao ZeDong - Leader of Com. China 1949-76
  54. Old Melbourne Goal - built 1845 - enlarged 1851 due to keep "gold rush" law and order
  55. Silence and Separation - foundations of punishment and reforms - silence masks
  56. Ned Kelly - family/Irish squatters - bushranger - stole livestock - killed several people  
1880 after years on the run - police sent posse for Kelly, his brother and gang  
On lookers lined the street and sat on rooftops to watch gunfire  
Kelly in handmade armor - shot in leg and captured - legend - many movies/books
  57. Quickly tried and executed - Kelly's last words: "Such as Life!" - hanging execution site  
Kelly's gun - death mask - used for identification and phrenology studies
  58. Aussie Rules Football - football means soccer - pitch - 2 teams of 18 players  
Played only in Australia - blend of rugby, soccer, American football and wrestling
  59. Essington Vs. Kangaroos - invented in Victoria (Melbourne) city and regional leagues  
Other AU sports - football, cricket, surfing, basketball, tennis, hockey, skiing
  60. International police incident at Telstra Dome in Melbourne
  61. Ship Wreck Coast - Great Ocean Road - 12 Apostles - limestone eroded coastline
  62. 12 Apostles - Port Campbell National Park
  63. London Arch - was London Bridge - broke off 1990/helicopter rescued 2 stranded people
  64. Koala in the wild outside Koala Cove Café/Caravan Park
  65. Mait's Rest Rainforest - Maitland Bryant Walk - one mile - ferns  
Regman's Eucalyptus Ash trees 2<sup>nd</sup> tallest in world - 400 feet tall - tall as 25 story building
  66. Eucalyptus tree roots - 700 kinds of Eucalypts - gum trees - stringy bark - ash
  67. Drive on left sign - tourist reminder
  68. Sovereign Hill - Gold Mining town in Ballarat - 1851 gold discovered  
Europeans, Americans, Chinese came to mine - gold rush fizzled 10 years later  
Marked end of AU as prison and began a nation - white population had tripled
  69. Sovereign Hill Village - working village museum - "New York Bakery"
  70. "Blood on the Southern Cross" dinner and pyrotechnic reenactment of 1854 uprising
  71. AU mines gold, silver, iron ore, bauxite(AL), coal, opals  
AU Opal - unique sandstone/low moisture content - discovered 1948 cattle station  
Opal doesn't have to be kept moist because of dry environment "Black opal"  
Aborigines call opals "Rainbow Serpent" - 95% of world's opals come from AU mines
  72. Uluru - "Red Centre"- Outback - vast area in middle of AU - 100 million years old  
Uluru-Kata Tjuta National Park - 520 square miles - 1984 park given back to Aborigines  
Pitjantatjara - Yankunyjat Jara - Aboriginal people  
1½ miles long - 5½ miles around - 142 feet above desert - 844 feet above sea level  
2x below ground - sand/rock iron oxide - "Bornhardt" weather resistant rock left standing
  73. Ayers Rock Resort - Desert Gardens Hotel - Area only has; 4 hotels/2 campgrounds/1 apt.

- Police/fire/bank/post office/shopping area/9 restaurants/5 bars/shuttle busses
- 74.Outback Pioneer BBQ - cook your own kangaroo - emu - crocodile - barramundi - live music  
Kangaroo meat - 80 million a year - import - contest 2,700 suggestions from 40 countries  
"Skippy" factor 1960's cute Roo show - winning name "Australus" - Quota 4 out of 40 mil.
- 75.Colors of Uluru at sunset - Most sacred place Aboriginal people - ancestors still there  
Harsh conditions - 1938 Daisy Bates wrote book The Passing of the Aborigines "The Au native can withstand all the reverses of nature, fiendish droughts and sweeping floods, horrors of thirst and enforced starvation; but he cannot withstand civilization"
- 76.Desert plants - spinifex (porcupine grass) roots grow out then down  
1 humped Camels only in AU - bought to build railroads - set free - 100,000 live in Outback  
Animals get moisture from food - will mate before water disappears  
Insects hard shells keep from drying out - plants grow low to start roots/keep moisture
- 77.Aborigines call hikers who climb Uluru -"Minga Mob" - Minga means ants
- 78.Aboriginal myth where Kuniya the python woman placed her eggs  
Giant battle of Uluru left marks/slope - red rock/body paint - cave/mouth weeping mother  
Dreamtime - Aboriginal traditional conception of how the Earth was formed and operates
- 79.Aboriginal rock art - creation stories depict their lives  
5,000 - 17,000 years old - caves - ceremonial sacred places - some areas are off limits  
Bark/feathers/fingers as paintbrushes - pigments dried ochres - white/red/yellow/purple  
Ground sculpture - dot paintings - handprints - patterns tell stories/ceremonies  
Water holes/people/emus/kangaroos/crocodiles/ turtles/snakes/lizards/bush tucker
- 80.Kata Tjuta - "The Olgas" - 36 domes - 14 mile circumference - means "many heads"
- 81.Walpa Gorge walk - (Olga Gorge) - Walpa means "windy" - Anandu men's laws/areas sacred
- 82."Sounds of Silence" diner presentation - middle of desert - didgeridoo
- 83."Talkabout Land and Sky" astronomy and Aboriginal myth presentation/looking at Jupiter
- 84.Darwin - Northern Territory "Top End" wet tropic area overlooking Indian Ocean/Timor Sea
- 85.Road to Kakadu - 8,000 square miles - Northern Territory - 5,000 rock art sites  
Kakadu National Park - Listed on United Nations World Heritage Property  
Bill Neidje/clan own Kakadu - Lease to Government of AU - 3 uranium leases - controversial
- 86.Gagudju Crocodile Holiday Inn - 1988 by the Gagudju Ab. Assoc. in shape of Croc  
Wild water buffalo from bus - 80 released from Asia 100 years ago - now 300,000 wild
- 87.Aurora Kakadu Resort - One of 4 resorts in Kakadu
- 88.Wild dingo outside my door - wild dog related to wolf - hunts Roos, berries, and insects
- 89.Evacuation sign - Flooding in summer wet season (Nov.. - April) Cyclone hit Mar. 2006  
Dry season - May to Oct. - Aborigines have 6 seasons they acknowledge
- 90.Aussie breakfast typical of British Bed and Breakfast meal - bangers/beans/tomato
- 91.Sulphur Crested Cockatoos - flocks - loud raucous screech/deafening - damage crops
- 92.Inland freshwater crocs - 9' long - long pointed snouts - eat insects/frogs/birds  
Saltwater (estrine) crocs - up to 20' long - floods/venture into fresh water - *ankle trimmers*  
100,000 to 150,000 in AU - eat horses/cows/water buffalo/man - fearless now
- 93.Dangerous - Aborigine girl fishing was killed by croc 40 miles from where we stayed
- 94.Hiked to Cahill's Crossing East Alligator River - spotted 2 crocodiles near fishermen
95. Ubirr - Aboriginal Rock Art site - edge of Arnhem Land - Picture of Bill Neidje

- Picture of deceased Aborigine covered up for spiritual reasons - no photographs
96. Black-footed rock wallabies
  97. Long-necked turtle - painted before hunting to ensure good luck and abundance
  98. Conservation Act 1999 - criminal penalty \$5,500 - civil penalty \$55,000
  99. Nambulwinjbulwinj - dangerous spirit who eats females after striking them with a yam
  100. "Namarrgon" (Lightening Man) - Barrginj (his wife) - lightening strikes flood plain
  101. Barramindi x-ray style rock art
  102. Green ants - ant chains drag leaves together - sticky silk from larvae - weave leaves
  103. Golden Orb Web Weaver Spider - web 3 foot diameter - females 2' body - harmless strong web has golden color - can catch birds - dewdrop spiders also use their webs
  104. Nourlangie Aboriginal Rock art site - x-ray art - overlooks Nardab Flood Plain  
Floodwaters shrink into ponds called billibongs during winter/dry season - Bones found
  105. East Alligator River (Yellow Water) crocodiles  
1974 - Conservation of Species Convention - stopped hunting wild crocs - started farming
  106. "Sweetheart" 17' croc stuffed in Darwin museum - 17,000 pounds  
Attacked 15 boats/motors - 1979 captured for his safety - cable snapped - drowned  
Newspaper in Darwin reported a 20' crocodile spotted while we were there
  107. Jabirus - black-necked stork - clatters beak- annoyed - both parents incubate eggs  
1/3 of AU birds are in Kakadu - Aborigines used lily tubes for breathing underwater
  108. Cathedral Termite mounds - largest - 20' high - 50 - 100 years old  
Queen - 30,000 eggs a day - eats center of Eucalyptus trees - related to cockroaches  
Blind worker termites mix saliva/droppings/soil to make a building cement
  109. Didgeridoo Hut and Art Gallery - Didgeridoos/boomerangs/art - can take pictures if buy art  
Art Aboriginal industry - many cultural and health issues - life expec. 20 years less
  110. Didgeridoo - Aboriginal instrument made from termite hollowed eucalyptus trees  
Aboriginal song and dance (corroborees) Played by blowing trumpet style - circular breathing  
Painted by Larry Bangarr/ Namardinn Clan - Mimi Spirit/Aboriginal ancestral guardian spirit
  111. Sugar cane - cane toads bought from Hawaii/islands to eat cane beetles - beetles too high  
Thrived - toxic poison sacks behind neck/ back of head - killed snakes/birds  
Lay 10,000 eggs every 2 weeks - round up days to collect/freeze & use for golf practice  
Animal groups stopped this - if fed dog food cane toads grow to 2½ pounds
  112. Kuranda scenic Railway through the Barron Gorge
  113. Tjapukai Aboriginal Dance Troupe - Cultural Center
  114. Skyrail gondola over the Barron Gorge National Park Rainforest - Blue Ulysses Butterfly  
View of Stony Creek Falls - cassowary native in this rainforest
  115. Eucalyptus tree roots - boomerangs - Aboriginal boomerangs 10,000 years old  
Hunting - non-returning (Kylies) Returning - sport and competition - no bows/arrows
  116. The Rainforest Habitat Wildlife Sanctuary - kangaroo with "Joey"
  117. Green tree frog - 54 species of frogs in Wet tropics area - development = species decline
  118. Olive Python - found in monsoon belt of Northern AU - eat rodents/reptiles
  119. Cassowary - Emu - flightless - 1<sup>st</sup> scientific study 15 years ago - only found in East. AU  
Casque bony growth on head to forage and push aside brush - males tend eggs/young
  120. Kookaburra - "Laughing Jackass" - kingfisher family - eats snake/lizards/birds

- Aborigines say loud human laugh will wake up mankind so they won't miss the sunrise  
Eats cane toads by hitting them on the head, knocking them out, and rolling them over
121. Burrawang Plant - poisonous - Aborigine's could leech the poison - made paste/ate it
  122. Mossman Gorge National Park - Wet tropics rainforest area
  123. Brian Clarke "Clarkie" hunted crocs 20 years - 2 inflatable boats/22 gun/basics only  
Lived off land for 4-6 weeks - hunted at night - eyes glow - crocs are more aggressive  
New breed not afraid - Told story of rescuing a girl at gorge and almost dying/drowning
  124. Oasis Resort, Cairns - swimming pool with sandy beach on one end
  125. Snorkling practice at the Oasis Resort swimming pool
  126. Fruit bats - flying foxes - hundreds in mango trees on edge of resort
  127. 16 kinds of bats in AU - 16" long- wingspan 5' - 2 lbs. - eat fruits - flower nectar
  128. Fruit bats are nocturnal - busy at dusk seeking food
  129. Ocean Spirit Cruise from Cairns Bay to Michaelmas Cay on the Coral Sea
  130. Great Barrier Reef - Michaelmas Cay - Sea gulls - protected site  
1% of Earth's surface - Bigger than Kansas/Italy/Great Britain - seen from space  
3,000 individual reefs - 900 islands - 1,616 miles long - seen from outer space  
15,000 species of fish - 400 coral - 500 birds - 215 birds - 16 sea snakes - 6 sea turtles  
4,000 mollusks - Largest single organism in world - 7 natural wonders of the world
  131. Snorkling off Michaelmas Cay
  132. Giant clam - mollusks - 3 to 4 feet long - 500 lbs. - Humbug Damsel - Bluegreen Damsels
  133. Nosey Parrot Fish - Staghorn Coral - Knobby Coral
  134. Brain Coral - Spaghetti Coral - Elephant Ear Coral
  135. Sea Fan Coral seen from the glass bottomed boat
  136. Varied Architecture of Sydney - modern and Victorian
  137. Sydney Royal Botanic Gardens - native to hundreds of fruit bats
  138. Wattle - legume family - 750 species of Acacia - largest genus in AU  
Found all over AU regardless of soil and temperature - "wattle & daub" walls
  139. Botanic Gardens sustainability project - wood chip maker
  140. Sydney Opera House - competition late 1950's - Danish Architect Jorn Utzon won  
Utzon resigned 1966 - cost arguments/withheld payments - never saw it finished
  141. Completed 1973 - Cost/\$102,000,000 - 3000 events yearly - 1,000 rooms - 1 mil. tiles
  142. Sydney Bridge - \$165-295 to climb - 3½ walk
  143. Tourists climbing Sydney Bridge - Flags half mast because of India terrorist bombings
  144. View of Sydney from harbour cruise
  145. Luna Park - Famous recreation park built 1935
  146. Hero of Waterloo Inn 1843 - impressed sailors - 1 mile tunnel to Sydney Harbour
  147. Darling Harbour - Sydney Aquarium
  148. Sydney Aquarium - lionfish - moon jellyfish - green turtle - lady sea dragon
  140. Australian Fulbright and Odyssey Staff at Australian-American Club, Sydney
  150. G'Day Mate!