






# **SOCIAL EDUCATION ACTIVITIES Years 8-10**



Activity	Resources			Related Activities
	Site	Material	People	
<b>1. PLANT IDENTIFICATION WALK</b>  <b>STRAND:</b> The Natural Environment <b>UNIT:</b> The World Around Us (Yr 8)  <ul style="list-style-type: none"> <li>Teacher introduces students to Rapid Creek freshwater/saltwater system</li> <li>In consultation with guide, teacher selects a site/ walk for students</li> <li>On this walk the guide identifies the major plant species and its features</li> <li>Guide leads discussion on the main features of the plant community (eg how and why it has changed over time)</li> <li>Students may take notes/drawings/photographs/ videos to document the walk or construct an educational kit profiling the plant community</li> <li>The educational kit contains:               <ul style="list-style-type: none"> <li>-a plant species key (could show flowering, fruiting and seeding times plus different uses of each plant)</li> <li>-a vegetation map showing where different species occur in relation to the whole plant community</li> <li>-a graph depicting the most frequently occurring species down to the least frequently occurring</li> </ul> </li> </ul>	See Resource Base for <u>Activity &amp; Historical Site Maps</u> (refer to numbers in brackets)  Mouth of creek (3) Monsoon forest (12&13) Transition communities (10&11) Eucalypt woodlands (15&16) Pandanus forest (14) Paperbark community (18) Grasslands (17)	<b>Mangrove Information</b>  <b>Plant Information</b>  Video camera camera film sketch pads  <b>Other Educational Resources (vegetation survey/</b>	<b>Plant Information</b>  <b>Rapid Creek Local History</b>  <b>Larrakia Information (Billy Risk)</b>  <b>Computer Education &amp; NT Animals Information System</b>	<ul style="list-style-type: none"> <li>Students consult guide or people on contact lists for background information.</li> <li>See plant community survey and vegetation survey worksheets as further potential activities on a plant identification walk.</li> <li>Refer to Social Education Activity No's 2 and 3: (Plant community comparative studies and mangrove identification walk) for follow-on activities.</li> <li>Bush tucker and medicinal uses of plants may be highlighted in some of these walks.</li> </ul> 



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<b>2. PLANT COMMUNITY COMPARATIVE STUDY</b>  <b>STRAND: The Natural Environment</b> <b>UNIT: The World Around Us (Yr 8)</b>  <ul style="list-style-type: none"> <li>* Teacher introduces students to Rapid Creek freshwater/saltwater system</li> <li>* Students visit different plant communities on Rapid Creek (see Resources-site column)</li> <li>* Guide explains main features of each plant community and discusses dominant species. The discussion may also include the effects of Cyclone Tracy, fire, erosion and urban development on each community</li> <li>* Students produce:               <ul style="list-style-type: none"> <li>-a vegetation map showing distribution of plant species in two plant communities</li> <li>-a report outlining the bush tucker and medicinal uses of major plant species (this may be a photographic report, a slide display, or a written report with supporting illustrations)</li> </ul> </li> </ul>	Classroom  Mangrove sites (4-8)  Monsoon forest (12&13)  Transition communities (10&11)  Eucalypt woodlands (15&16)  Pandanus forest (14)  Paperbark community (18)  Grasslands (17)	<b>Mangrove Information</b>  <b>Plant Information</b>  <b>Other Educational Resources (vegetation survey)</b>  <b>Rapid Creek Local History</b>  <b>Larrakia Culture &amp; History</b>  Video camera camera film sketch pad	<b>Mangrove Information</b>  <b>Plant Information</b>  <b>Rapid Creek Local History</b>  <b>Larrakia Information (Billy Risk)</b>  <b>Computer Education &amp; NT Animals Information System</b>	<ul style="list-style-type: none"> <li>* Students may select a plant community to carry out a Case Study OR they may choose a specific aspect of one community upon which to focus (eg bush tucker and medicinal uses of plants found on the site).</li> <li>* Guide may also lead a discussion on historical/cultural features of the communities visited OR students could research that information for themselves.</li> <li>* Students may video/photograph/sketch throughout this activity as a form of documentation.</li> <li>* It is strongly recommended that students are made aware of the wide range of different plant communities that are a part of the Rapid Creek freshwater/saltwater system.</li> </ul> 



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<b>3. MANGROVE IDENTIFICATION WALK</b>  <b>STRAND: The Natural Environment</b> <b>UNITS: The World Around Us (Yr 8)</b> <b>Modifying The Australian Environment (Yr 9)</b>  <ul style="list-style-type: none"> <li>Teacher introduces students to Rapid Creek freshwater/saltwater system and draws attention to the mangrove sites at the mouth of the creek</li> <li>In consultation with guide, teacher chooses a site/ walk for students</li> <li>Guide discusses major characteristics and functions of the mangrove community</li> <li>Guide identifies some of the major species of mangroves and draws the attention to their different characteristics</li> <li>Students may construct a mangrove educational kit through the media of photographs, videos, maps, slides, reports. This kit would focus on the dominant species of the mangrove community and any other related information ( eg significant Aboriginal or historical information).</li> <li>The kit contains: information on the major mangrove species (significant features, traditional Aboriginal uses and a pictorial representation of each mangrove species).</li> </ul>	Mangrove sites (4-8)  Comments  <ul style="list-style-type: none"> <li>It is beneficial for students to visit different mangrove sites so that they: <ul style="list-style-type: none"> <li>-compare various species and where they occur</li> <li>-understand the effects of the tide on some of the mangroves</li> <li>-are able to observe the impact of Cyclone Tracy and urban developments on mangrove sites</li> </ul> </li> </ul>	Mangrove Information  Rapid Creek Local History  Plant Information (Rapid Creek vegetation map)         video camera camera film sketch pads	Mangrove Information  Computer Education & NT Animals Information System	<ul style="list-style-type: none"> <li>This activity may include a discussion of the history surrounding the mangroves, for example: <ul style="list-style-type: none"> <li>-World War 2 (the barbed wire, star pickets, scraps of metal buried in mangrove mud to thwart a possible Japanese invasion)</li> <li>-destruction of mangroves due to a proposed canal, lake and residential development of the 1970's</li> <li>-damaging effects of Cyclone Tracy (1974) on mangroves</li> <li>-straightening of Rapid Creek near Trower Rd bridge during development of the suburb of Jingili</li> </ul> </li> <li>Prior to this activity students preview the Mangrove Slide and Booklet Package (NT Dept of Education), so that they are more capable of identifying mangrove species on-site.</li> <li>Students are able to compare a more established/intact mangrove community (eg upstream from Trower Rd bridge) with a damaged community (eg near NTU, Casuarina campus).</li> <li>Refer to Social Education Activity No.13 (Bird watching) for related activities at mangrove sites.</li> </ul> 



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<b>4. MANGROVE CASE STUDY</b>  <b>STRAND: The Natural Environment</b> <b>UNIT: The World Around Us (Yr 8)</b>  <ul style="list-style-type: none"> <li>* This activity focusses on a particular mangrove site and highlights:               <ul style="list-style-type: none"> <li>-major species (significant features-drawings of plants, their flowers and fruit)</li> <li>-urban impact upon the site (residential development, rubbish)</li> <li>-Aboriginal use of the site- both plant species and marine life</li> </ul> </li> <li>* Students visit a mangrove site.</li> <li>* They may select a mangrove site and its species as the focus of their educational kit. This kit could take the form of:               <ul style="list-style-type: none"> <li>-photographic report with accompanying text</li> <li>-slide display with taped commentary</li> <li>-videotape with accompanying commentary</li> <li>-tape tour of a particular mangrove community</li> <li>-poster/display</li> <li>-written descriptive report with drawings and photographs.</li> </ul> </li> </ul>	  Classroom  Mangrove sites (4-8)	<b>Mangrove Information</b>  <b>Plant Information (Rapid Creek vegetation map)</b>  <b>Rapid Creek Local History</b>	<b>Mangrove Information</b>  <b>Computer Education &amp; NT Animals Information System</b>  <b>Mangrove Bush Tucker Information</b>  	<ul style="list-style-type: none"> <li>* It would be beneficial for students to view mangroves at low and high tide and see first hand the extent of inundation they are subject to.</li> <li>* For further information refer to Social Education Activity No 3 (Mangrove Identification Walk).</li> <li>* The taped commentary could be recorded after the on-site visit.</li> <li>* Refer to English Activity No 2 (Bush tucker/ storytelling). It involves collecting bush tucker in the mangroves and could be modified for use in this activity.</li> <li>* Students may continue from this activity and focus on:               <ul style="list-style-type: none"> <li>-animals of the mangrove forest</li> <li>-the mangroves' role in the marine food chain</li> <li>-changes in the mangroves of Rapid Creek</li> </ul> </li> </ul>

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<p><b>5. MANGROVE BUSH TUCKER WALK</b></p> <p><b>STRAND:</b> The Natural Environment  <b>UNIT:</b> The World Around Us (Yr 8)  <b>STRAND:</b> Intercultural Studies  <b>UNIT:</b> Aboriginal People In Australia (Yr 10)</p> <ul style="list-style-type: none"> <li>* Guide introduces students to mangrove community and explains their main functions and characteristics</li> <li>* Guide may also describe the traditional importance of the mangroves and the sea to the Larrakia people</li> <li>* This talk could include the Larrakia sacred site- <i>Dariba Nunggalinya</i></li> <li>* Guide leads walk through mangroves of Rapid Creek, identifying mangrove species and their uses for tucker and medicine</li> <li>* Guide and students collect a small amount of bush tucker for cooking eg "longbum" and cockles</li> <li>* Students are shown how to cook them</li> <li>* Students produce a Larrakia mangrove bush tucker poster/display, slide display, video, tape tour or report. This presentation depicts major mangrove species, where they are found and traditional Aboriginal uses</li> <li>* Students gain knowledge of different mangrove species.</li> </ul>	<p>Casuarina Beach (2)</p> <p>Mangrove sites (4-7)</p> 	<p><b>Plant Information</b></p> <p><b>Benthos, Amphibians, Mammals, Reptiles Information</b></p>	<p><b>Mangrove Information</b></p> <p><b>Mangrove Bush Tucker Information</b> (Billy Risk, Glenn Wightman &amp; Lorraine Williams)</p> <p><b>Computer Education &amp; NT Animals Information System</b></p>	<ul style="list-style-type: none"> <li>* Refer to Social Education Activities No's 3 &amp; 4</li> <li>* See Social Education Activity No's 2, 3 &amp; 4 for further information and activities.</li> </ul> 


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<b>6. MANGROVE LEAF LITTER TRAP</b>  <b>STRAND:</b> The Natural Environment <b>UNIT:</b> The World Around Us (Yr 8)  <b>FIELD WORK</b>  <ul style="list-style-type: none"> <li>Students construct a half metre x half metre shaded cloth basket with a PVC frame (see diagram)</li> <li>The basket is placed under a mangrove tree above the high tide water mark. This basket catches falling mangrove leaves.</li> <li>Students identify and weigh mangrove leaves</li> <li>Students monitor the site and the collection of leaves over time (eg 10 weeks)</li> </ul> <b>RESEARCH</b>  <ul style="list-style-type: none"> <li>Students research information about the leaves and flowers of different mangrove species (eg when and why do different mangrove species lose their leaves)</li> </ul> <b>PRESENTATION OF FINDINGS</b>  <ul style="list-style-type: none"> <li>Each group produces a report on Leaf Litter production-flowers and fruit from their trap</li> <li>Students synthesise results, draw conclusions about leaf litter accumulated at various mangrove sites</li> <li>Student conference where groups present reports, results from individual traps and compare findings</li> </ul>	Mangrove sites (4-7)  	<b>Mangrove Information (Leaf Litter Trap Study in Woodroffe C. &amp; Bardsley K.)</b>  <b>Plant Information (Rapid Creek vegetation map)</b>	<b>Mangrove Information</b>  <b>Computer Education &amp; NT Animals Information System</b>	<ul style="list-style-type: none"> <li>Copies of the results of this activity should be sent to Greening Australia for entry into Database. This will enable other researchers to compare their findings in subsequent years with those of the students' research.</li> <li>This activity (No.6) could follow-on from or be associated with No.3 (Mangrove Identification Walk) or No.4 (Mangrove Case Study), eg students may be required to conduct a Case Study on a particular mangrove species in connection with the Leaf Litter Trap Activity.</li> </ul> 


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<b>7. CREEKWATCH</b>  <b>STRAND:</b> The Natural Environment <b>UNITS:</b> Modifying The Australian Environment (Yr 9) The Urban Environment (Yr 10)  <ul style="list-style-type: none"> <li>* Teacher may arrange for an introductory talk to be given by a guest speaker about the hydrology of Rapid Creek</li> <li>* Students adopt a site or a number of sites on Rapid Creek and continue to monitor the quality of the water over a period of time (eg a school year)</li> <li>* Students test the water periodically for turbidity, pH, suspended solids, oils greases and nutrient levels</li> <li>* Students work out what factors are influencing the water quality at the site they are monitoring (eg they might have to take into account the land use of the Rapid Creek catchment area &amp; where the run-off is coming from (eg caravan parks, golf course, drainage, sewerage, Darwin airport, RAAF Base)</li> <li>* Students record findings of water quality monitoring and compare to PAWA's results. The water quality testing kit contains instructions on how to go about testing and recording findings.</li> <li>* Information obtained is entered into Database at Greening Australia</li> </ul>	  Mouth of creek (3)  Mangrove sites (7&8)  Monsoon forest (12&13)  North-East point of Marrara swamp  Southern point of Marrara swamp	<b>Water Quality/ Hydrology (Report by Cameron McNamara)</b>  	<b>Creekwatch Information</b>  <ul style="list-style-type: none"> <li>* PAWA have several sites on Rapid Creek where they regularly monitor water quality. Teachers/students may obtain access to their data and personnel. Students will be able to compare findings with PAWA's data.</li> <li>* This activity is dependent on the availability of a water quality testing kit.</li> <li>* An initial walk on-site for students should be arranged in order to ascertain the plant species growing there already.</li> <li>* Students may carry out water quality testing near the revegetation site.</li> </ul>	




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<p><b>8. REVEGETATION</b></p> <p><b>STRAND:</b> The Natural Environment  <b>UNITS:</b> The World Around Us (Yr 8)  Modifying The Australian Environment (Yr 9)</p> <ul style="list-style-type: none"> <li>* Teacher/students, in consultation with Greening Australia adopt a site on Rapid Creek for: <ul style="list-style-type: none"> <li>-identifying native and other plant species</li> <li>-revegetating the site with native plant species</li> </ul> </li> <li>* Prior to the revegetation activity it may also be appropriate for students, in conjunction with Greening Australia, to: <ul style="list-style-type: none"> <li>-collect native plant seeds</li> <li>-propagate plants from seed,</li> <li>-replant seedlings on site and</li> <li>-monitor &amp; maintain the growth of these plants and the plant community site as a whole</li> </ul> </li> <li>* Students plot the locations of native and other plant species onto a site map and then plot the locations of <u>revegetated</u> areas. The school should keep this map.</li> </ul>	<p>Monsoon forest (12)</p> <p>Between Water Gardens and Kimmorey bridge</p>	<p><b>Plant Information</b></p> <p><b>Materials for seed collection, propagation see Greening Australia contact list)</b></p>	<p><b>Plant Information</b></p> <p><b>Greening Australia</b></p>	<ul style="list-style-type: none"> <li>* This activity also relates to other courses: geography, environmental science, maths and English.</li> <li>* Direct seeding could be another method to trial in revegetating a site.</li> <li>* In subsequent years, the school can compare the distribution of species before revegetation with the distribution pattern several years later. Students could try and account for any changes in vegetation patterns by comparing the two maps.</li> </ul>




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<b>9. HUMAN IMPACT STUDIES</b>  <b>STRAND:</b> The Natural Environment <b>UNIT:</b> Modifying The Australian Environment (Yr 9) The Urban Environment (Yr 10)				<ul style="list-style-type: none"> <li>A simpler variation of this activity would be a litter survey. This would assess the level of human use and impact on the site.</li> <li>The site surveyed in this activity could also be adopted by students to clean-up, protect and revegetate. Refer to Social Education Activity No 7 (Revegetation).</li> <li>Students could document the activity both BEFORE and AFTER through photography and other media.</li> <li>This activity has the potential to be used in other subject areas such as Science and English.</li> <li>A variation on this activity could be to compare two different plant communities: a) a plant community affected by wildfire and b) a plant community affected by planned fire (eg inside the airport boundary).</li> <li>A follow-on case study could be a NOW and THEN research project. By firstly studying the documented land use of the Rapid Creek Catchment Area in 1982 (see Water Quality/Hydrology Information); secondly, comparing it to the present day land use; and finally comparing it with the projected/potential land use laid out in 1982 (in the Cameron McNamara report). Students would come to some conclusions as to why the present day land use differs from that set out in the above report.</li> <li>From this study students will be able to recommend ideas for the management of the Rapid Creek system to Darwin City Council, NT Government, community groups and newspapers.</li> <li>The documentation of this activity may also be used as a resource in carrying out English Activity No 10 (Human Impact Studies).</li> </ul>
<b>A) USER SURVEY Group Work</b> <ul style="list-style-type: none"> <li>Students choose a site on Rapid Creek to survey. This survey will illustrate the extent of human use of the site. It will also give an indication of how it is used, and for what purpose.</li> <li>Students draw conclusions from the survey and assess what may need to be done in the future to manage, protect and improve the condition of the site chosen.</li> </ul>	<b>user survey</b> Mouth of Rapid Creek (3) Mangrove sites (4-8) Monsoon forest (12&13)	<b>user survey</b> <b>Other Resources (Rapid Creek User Survey)</b>	<b>user survey</b> <b>Mick Guinea Greening Australia</b>  <b>Plant Information</b>	
<b>B) EROSION IMPACT Group Work</b> <ul style="list-style-type: none"> <li>Students assess the impact of erosion over a period of time (eg 12 months) on a section of the creek. This is done through visual and photographic monitoring.</li> </ul>	<b>erosion impact</b> Monsoon forest (12&13)	<b>erosion impact</b> Camera/film Star pickets	<b>erosion impact</b> <b>Greening Australia</b>  <b>Plant Information (Nick Gambold)</b>	
<b>C) FIRE IMPACT</b> <ul style="list-style-type: none"> <li>This activity needs to be carried out before and after fire has passed through a plant community.</li> <li>Students measure out a plot (20 metres x 20 metres) in a plant community. Over a period of 12 months students carry out floristic studies of the composition and structure of the species ie density, type, sparseness, community description, percentage cover.</li> </ul>	<b>fire impact</b> Monsoon forest (12&13) Transition communities (10&11) Eucalypt woodlands (15&16)	<b>fire impact</b> <b>Plant Information (Foliage Cover Reference Guide)</b>	<b>fire impact</b> <b>Greening Australia</b>	

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<b>D) LAND USE SURVEY</b> * Students construct a land use map of the Rapid Creek catchment area under the headings: residential, farm use, industrial, vacant land, sporting/recreational, conservation, educational, commercial (eg shops, hotels), transport and crown land. This map is constructed using the catchment area map found in Water Quality/Hydrology Information (Resource Base) combined with a Darwin city map. Students may also go out on site to collect this data.	land use survey see Rapid Creek catchment map in Resource Base	land use survey <b>Other            Educational            Resources            (See Dwyer            Report)</b>  <b>Water Quality/            Hydrology            Information</b>	land use survey Richard Ledger  <b>Creekwatch            Information</b>	


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<p><b>10. RAPID CREEK MISSION STUDY</b></p> <p><b>STRAND:</b> The Social Environment <b>UNIT:</b> Aspects of NT History (Yr 10)</p> <ul style="list-style-type: none"> <li>Students are introduced to the topic of Aboriginal communities and missions/missionaries. A guest speaker could be invited to address the class.</li> <li>Guide leads discussion which may include such topics as: <ul style="list-style-type: none"> <li>-the Larrakia/Woolna/Alligator tribes that lived/camped/visited the mission and reasons for conflict</li> <li>-crops, fruit trees grown at the mission</li> <li>-the failure rate of Jesuits aim to convert the Aborigines to Christianity ("Baptism no good!")</li> <li>-the area the mission covered around Nightcliff and Rapid Creek</li> </ul> </li> <li>Guide takes students to the site of the mission well (Earl Place, Milner) and to the site of the main buildings of the mission</li> <li>Students produce an historical newspaper article or an historical account portraying the mission days of the 1880s- how Aboriginal people lived at the mission, what crops were grown, relationships between Jesuits and Aborigines.</li> <li>Students create a journal/diary written from a priest's perspective.</li> </ul>	<p>Classroom</p> <p>Water Gardens (9)</p> <p>Outer perimeter of mission -intersection of Ryland Rd &amp; Pinder St (site of main buildings) to Nightcliff coast</p> <p>Site of mission well, Earl Place, Milner</p> <p>Battle site &amp; burial ground, mouth of Rapid Creek (H2)</p> <p>See Historical Sites in Resource Base</p>	<p><b>Rapid Creek Mission Information</b></p> <p><b>Larrakia Culture &amp; History (Tape &amp; transcript of interview with Topsy Secretary- Larrakia elder)</b></p> <p><b>Rapid Creek Local History (See handbook by Barter L.)</b></p>	<p><b>Rapid Creek Mission Information</b></p> <p><b>Rapid Creek Local History (Leith Barter)</b></p> <p><b>Greening Australia</b></p>	<ul style="list-style-type: none"> <li>As a follow-on activity students view the film: <u>The Mission</u>. <u>The Mission</u> portrays the Jesuits experience with indigenous people in South America. There is a direct correlation to the Jesuits interactions with the Larrakia people of the Top End.</li> <li>To create authentic, accurate texts about the past, students need to build up knowledge about people and events of those times <u>before</u> they write.</li> <li>Teachers could study the impact of missions and white settlement on Aboriginal culture in general. Students could also learn how Larrakia people lived, traditionally, off the land and sea compared to today. Refer to Social Education Activity No.11 (Larrakia Case Study).</li> </ul> 



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<p><b>11. LARRAKIA CASE STUDY</b></p> <p>STRAND: The Social Environment UNIT: Colonisation and Change (Yr 10) STRAND: Intercultural Studies UNIT: Aboriginal People In Australia (Yr 10)</p> <ul style="list-style-type: none"> <li>* Students are introduced to Larrakia culture and history by a visiting guest speaker. This could occur on-site or in the classroom.</li> <li>* Students visit significant Larrakia sites around Rapid Creek/Nightcliff with a guide</li> <li>* Students learn about the importance of 'country' and its vegetation to Larrakia people</li> <li>* Students learn Larrakia words for plants, Larrakia stories, customs, kinship system, and tribal boundaries</li> <li>* Students produce a project that includes information on- Larrakia language, tribal boundaries within NT, Larrakia stories and dreaming sites and family networks. It may also include a discussion about the impact of European settlement on the Larrakia way of life.</li> </ul>	<p><b>Plant Communities</b></p> <p>Mangrove sites (4-5) Monsoon forest (12)</p> <p><b>Significant Larrakia Sites</b></p> <p>Mouth of Creek (3) Nightcliff Fish Trap</p> <p><i>Dariba Nunggalinya</i> (Old Man Rock-H1),</p> <p>Casuarina beach (H2) <i>Minjamarrmar</i> (Banyan tree, Nightcliff)</p>	<p><b>Larrakia Culture &amp; History</b></p> <p><b>Rapid Creek Mission Information</b></p>	<p><b>Larrakia Information</b></p> 	<ul style="list-style-type: none"> <li>* Refer to English Activity No.2 (Bush Tucker/Storytelling) for further ideas/options for other educational programmes.</li> <li>* This activity (Bush Tucker/Storytelling) can also be seen as a Social Education Project.</li> <li>* Visiting guest speakers could explore with students such things as: <ul style="list-style-type: none"> <li>-the science of anthropology</li> <li>-a specific aspect to Larrakia culture (eg language, sacred sites)</li> </ul> </li> <li>* <i>Dariba Nunggalinya</i> (Old Man Rock) and Nightcliff fish trap are best viewed at low-tide.</li> </ul>

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<p><b>12. NOW AND THEN STUDY</b></p> <p><b>STRAND:</b> The Social Environment  <b>UNIT:</b> People Of The Past (Yr 9)  <b>STRAND:</b> The Social Environment  <b>UNIT:</b> Aspects of NT History (Yr 10)</p> <ul style="list-style-type: none"> <li>This activity compares Rapid Creek in a past era to today.</li> <li>Students visit historical sites of importance along Rapid Creek</li> <li>Students interview long term Rapid Creek and Darwin residents about what the creek and its surrounding areas were like (eg its vegetation, lack of roads and housing)</li> <li>Students present their findings as an:               <ul style="list-style-type: none"> <li>-illustrated time-line</li> <li>-account of changes based on interviews</li> <li>-a fictionalised biography based on interviews</li> </ul> </li> </ul>	<p>Yankee Pool (H9)</p> <p>Site of mission well (Earl Place, Millner)</p> <p>Mouth of Creek (H3)</p> <p>Mangrove sites(4-6)</p> <p>See Historical Sites-Resource Base</p> <p>Water Gardens (9)</p> <p>Casuarina Beach (2)</p>	<p><b>Larrakia Culture &amp; History</b></p> <p><b>Rapid Creek Local History</b></p> <p><b>Rapid Creek Mission Information</b></p>	<p><b>Rapid Creek Local History</b></p> <p><b>Larrakia Information</b></p>	<ul style="list-style-type: none"> <li>This activity is closely related to the English Activity No 1 (Creating An Oral History). Students could record an interview as oral history as part of this activity.</li> <li>This activity could be more specifically focussed. eg Larrakia culture, before and after white settlement. This would relate to Social Education Activity No.11 (Larrakia Case Study). Another example could be to profile the Chinese community in Rapid Creek and Darwin in years gone by and to compare this to the present day.</li> <li>Teacher could bring in guest speakers from Rapid Creek Local History contact list.</li> </ul>



Activity	Resources			Related Activities
	Site	Material	People	
<p><b>13. BIRD WATCHING</b></p> <p><b>STRAND:</b> The Natural Environment  <b>UNITS:</b> The World Around Us (Yr 8)  The Urban Environment (Yr 10)</p> <ul style="list-style-type: none"> <li>* Students are introduced to the topic of the most common birds found around Darwin. This information may be passed onto students by a guest speaker. They are also informed as to what are the most common species of birds to be found in the different plant communities of Rapid Creek.</li> <li>* Students go to Rapid Creek to carry out bird watching. They use bird checklists and descriptions found in the Resource Base.</li> <li>* Students identify bird species. They may also describe and sketch the birds they see. Photographs and descriptions of the plant community where the birds were seen could also form a part of the study.</li> <li>* Sketches and photographs of birds can then be placed on a wall-sized transect diagram of Rapid Creek environs to show the habitats where they were sighted.</li> </ul>	<p>Mangrove site (4)</p> <p>Water Gardens (9)</p> <p>Monsoon forest (12&amp;13)</p> <p>Transitional communities (10&amp;11)</p> <p>Eucalypt woodlands (15&amp;16)</p> <p>Pandanus forest (14)</p> <p><b>Comments</b></p> <ul style="list-style-type: none"> <li>* The mangrove community at the mouth of Rapid Creek offers the best location for seeing the greatest number and variety of birds.</li> </ul>	<p><b>Bird Species Information</b></p> 	<p><b>Bird Species Information</b></p> <p><b>Mangrove Information</b></p> <p><b>Fish Species Information</b></p> <p><b>Benthos, Amphibians, Mammals, Reptiles Information</b></p>	<ul style="list-style-type: none"> <li>* Students may adopt a site on Rapid Creek to monitor bird species occurring over a semester. At this site students may also monitor for the occurrence of fish, reptiles, frogs and mammals. (See the relevant material in the Resource Base)</li> <li>* Other activities on-site could focus on fish species, reptiles, frogs and mammals.</li> <li>* Refer to English Activity No 14 (Nature/Bird diary).</li> <li>* Sketchings and photographs may be taken to document the activity</li> <li>* See Bird Observation Worksheet for further activities</li> <li>* Refer to the bird checklist in the Thompson and Goodfellow text under the headings: Aquatic Habitats, Open Forest, Monsoon Forest, Paperbark Swamp and Mangroves.</li> </ul>

### Other Social Education Activities Could Include:

1. Rare plant case studies.
2. Mangroves: coastal management and pollution.
3. History of the Chinese community in the Rapid Creek area.
4. Tidal studies.
5. Soil studies.
6. Comparing monsoon forests (eg Rapid Creek with Holmes Jungle or Howard Springs).
7. Timeline study of Rapid Creek and Darwin.
8. Students create a herbarium - collecting, pressing specimens plus artwork.
9. Airport bridge issue - research project.
10. Vegetation survey/plant community survey.
11. Save the Bush: student activities booklet.
  - Bush explorer game, bushland ecosystem/habitat studies.
  - Bushland diversity.
  - Aboriginal and Bush stories.
  - Games.
12. Wildlife/Fauna studies (eg lizards, skinks - population movement).