**Appendix 18 Data for species Assemblages Lyons et al (2004)**

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| **Assemblage** | **Number Species confined to wetland habitats** | **Number of species recorded on gypsum**  | **Soils and Topography** | **Comments** | **Characteristic species** | **Location****Bioregions** |
| 1.2 | 14 out of 43  | 26 out of 3574% | Inland primary salt lake systems and associated valley floors. Richest on fine textured calcareous and gypseous soils.Moderate to high ELCODE not subject to inundation | Several taxa are associated with gypsum substrates *Goodenia* sp. Lake King (*Goodenia salina)* and *Kippistia suaedifolia* | *Goodenia* salina *Kippistia suaedifolia* *Asteridea athrixioides Hemichroa diandra* *Sondottia connata* *Eucalyptus flocktoniae Maireana appressa* | Avon Wheatbelt Mallee Yalgoo Coolgardie |
| 2.6 | 8 out of 10 | 5 out of 955% | Gypsum and saline clay substrates on margins, or on centrally raised beds, of inland saline playas and pans.% gypsum was a significant term in the GLM model | Small group taxa Species poor standsSeveral undescribed species known from few localities.  | *Frankenia* sp. southern gypsum *Halosarcia* sp. lake Moore (*Tecticornia loriae)**Triglochin lyonsii* ms*Hydrocotyle hexaptera* ms*Chondropyxis halophila**Trichanthodium exile* | Avon Wheatbelt Mallee Yalgoo Coolgardie |
| 3.2 | 16 out of 21 | 18 out of 2186% | Coastal and near coastal salt lakes and southern inland saline playas. Within wetlands taxa occupy berms and elevated flats, often of evaporate derived substrates. Moderate to high ECELCODE (intermediate wetland elevations) | *Austrostipa pycnostachya* also non-wetland. | *Austrostipa pycnostachya* *Wilsonia humilis**Hagiela tatei**Frankenia tetrapetala**Lawrencia glomerata**Tegicornia uniflora**Austrostipa juncifolia**Isotoma scapigera* | Coastal and southern near coastal wetlands.Esperance sandplainsSouthern Avon WheatbeltMallee |
| 3.3 | 2/3 restricted to wetlands | 23 out of 2496%10 weeds | Primary and secondary saline/brackish and disturbed freshwater wetland edges.Wetland marginsELCODE 2 and 3 max richness % gypsum was a significant term in the GLM model | Widespread taxa included Taxa not restricted to wetlands\*Hordeum glaucum\* Hordeum leporinum\*Lolium sp | *Apium annum**\*Cotula bipinnata**Melaleuca halmaturorum**\*Parapholis incurva \*Spergularia rubra**Tecticornia doleiformis**Tecticornia indica* *Tecticornia quinqueflora**Triglochin mucronata* | Coastal and Wheatbelt |
| 4.1 | 22 out of 23  | 21 out of 2391% | Sandy berms, strand lines and low sandy flats of inland primarily saline playas and braided saline drainage linesELCODE 2 and 3 max richness | Some northern taxa associated with Gypsum - *Frankenia conferta* *Neosciadium glochidiatum*7 species *Tecticornias* |  *Tecticornia undulata**Tecticornia halocnemoides**Tecticornia peltata**Tecticornia pruinosa**Gunniopsis septifraga* | Wheatbelt into the adjacent arid zone. Subset N Avon wheatbelt |
| 4.2 | All | 4 out of 944% | Edges of channels in braided primary saline drainage lines, slightly elevated sandy rises and margins of primary saline playas and small pans. Seasonally leached sands rather than evaporate derived substrates (3.3) | Uncommon taxa | *Roycea pycnophylloides**Sarcocornia globosa**Tecticornia* sp. central wheatbelt*Frankenia bracteata**Drosera zigzagia* | Avon WheatbeltMallee |
| 12 | All | 1 out of 617% | Sandy margins of saline playas and braided drainage lines Similar habitat to 4.2 poorly known | *Millotia steetziana* recorded on gypsum | Undescribed taxa *Tribonanthes minuta**Hypoxis salina**Calandrinia* sp. Hyden | MalleeEsperanceAvon WheatbeltJarrah forest |
| 16 | None restricted to wetlands | 11 out of 2446%3 weeds | Widespread on more fertile granitic soils, orange sandy loams and finer textured valley floor soils that are non saline. Around wetlands max richness occurred on dunes and flats. Dominated by terrestrial taxa | Dominated by widespread herbs | *Acacia acuminata**Eucalyptus loxophleba* subsp. *loxophleba**Gonocarpus nodulosus**Quinetia urvillei**Drosera glanuligera**Millotia tenuifolia**Dianella revoluta**Podolepis lessonii**Daucus glochidiatus* | Avon Wheat belt centre of taxa distribution |
| 17 | 5 out of 50 | 25 out of 5050%3 weeds | Preference for more fertile granite derived soils. Low EC. Moderate to high elevations | Typical of semi-arid Acacia, Eremophila and Melaleuca dominated shrublands and eucalypt woodlands. Wide spread lower rainfall non-wetland annuals and taxa specific to shrublands on lunettes and flats within salt lake systems | *Lawrencella rosea**Actinobole uliginosum**Sarcozona praecox**Podotheca pritzelii* | Avon WheatbeltMax richness in NE study area |
| 18 | 22% restricted to wetlands | 56 out of 6882%13 weeds | Most associated with saline and semi-saline habitats. Margins of naturally saline playas and braided drainage systems | Broad array of habitats | Saline habitat- *Atriplex hymenotheca**Didymanthus roei**Gnephosis angianthoides**Stenopetalum salicola**Centrolepis humillima*Saline influence *Lycium australe**Threlkeldia diffusa**Pogonolepis stricta**Rhagodia drummondii**Mesembryanthemum nodiflorum**Atriplex paludosa* | Dominated by annual herbs that have distributions centred within the Avon Wheatbelt and Mallee |
| 19 | 31% restricted to wetlands | 18 out of 63 species28%8 weeds | More restricted to primary salt lake habitatsNon wetland habitats of valley floorsModerate to high ELCODE | Shrublands on elevated rises as well as mid slope chenopod dominated low shrublands on margins of salt lakes | *Gunniopsis quadrifida**Eremophila miniata**Maireana amoena**Maireana atkinsoniana* | Distribution of taxa northern Avon WheatbeltGeraldton sandplainsYalgoo |
| 20 | 9% restricted to wetlands | 33 out of 7643%4 weeds | Within wetlands on elevated flats and dunes in primary salt lake systems17 and 19 northernSandy lunettes and flats  | Widespread annual herbsDunes Darwinia sp. KaronieLeucopogon sp. Kau Rock | *Carpobrotus modestus**Melaleuca brophyi*Restricted to wetlands- *Eucalyptus sargentii**Eualyptus salicola**Bossiaea halophila**Lomandra micrantha* subsp. *teretifolia* | Central and southern wheatbeltAvon wheatbeltMallee |
| 21 | None restricted to wetlands | 24 out of 3470 %7 weeds | Finer textured soils of valley floors and broad Aeolian plains associated with primary salt lake systems |  | Strongly associated with primarily saline wetlands – *Acacia inceana**Millotia major**Eucalyptus kondininensis* | Southern Avon WheatbeltMallee Coolgardie and northern Avon Wheatbelt |