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Red gum everywhere! Fringed leaves dappling, the glowing new sun coming through, the large, feathery, honey-sweet blossoms flowering in clumps, the hard, rough-marked, red-bronze trunks rising like pillars of burnt copper, or lying sadly felled, giving up the ghost. Everywhere scattered the red gum, making leaves and herbage underneath seem bestrewed with blood.

-*The Boy in the Bush*, D.H. Lawrence and Mollie Skinner

(1924/2002, 92-93)

## **1. Remembering Plants**

In the biogeographically diverse terrain of Southwestern Australia, this article theorizes botanical memory through the exploration of environmental memory, multisensoriality, and human emotion. Infused with emotional responses to the conservation and extinction of plant species, botanical memory traces broader memories of nature and environmental change. Encompassing an area from Shark Bay in the upper northwest corner to Israelite Bay east of Esperance in the southeast corner, “the Southwest,” as the region will be referred to hereafter, is the only internationally recognized Australian biodiversity hotspot. The Southwest is a “botanical province” and one of the most floristically varied places on the globe with close to forty percent of its species occurring naturally nowhere else (Hopper 1998, 2004; Paczkowska and Chapman 2000; Corrick and Fuhrer 2002; Conservation International 2007;

Breedon and Breedon 2010) (Fig. 1). Since the establishment of the Swan River Colony in the 1800s, the Southwest has been a popular wildflower tourism destination during the spring months of September and October in particular when iconic species, such as kangaroo paws, wreath flowers, and everlastings, blossom (Ryan 2011; Summers 2011). Despite relatively recent recognition of the global importance of its biodiversity, the Southwest has been dramatically altered through modern agricultural expansion, urban development, and anthropogenic plant diseases (Beresford et al. 2001).



**Fig. 1. Places of Botanical Diversity in the Southwest of Western Australia.** The Southwest comprises a diversity of places of botanical significance including Lesueur, Fitzgerald River and Stirling Range national parks as well as metropolitan Perth locales such as Anstey-Keane Damplands. (Image adapted from Figure 1, Western Australian Biogeographic Regions and Botanical Provinces, after Thackway and Cresswell, 1995 in Paczkowska & Chapman, 2000, inside cover; Inset image from Conservation International 2007)

Connecting individual remembrance to collective remembering about thriving or declining plant environments, botanical memory entails bodily and cultural memory. The fragrances, sounds, tastes, and tactile sensations of plants summon this form of environmental memory that may be both shared amongst individuals and invoked through physical interaction with flora. Characterized by these collective and bodily traces, botanical memory broadens the study of individual sense-based recollection of flora to the human communities living in proximity to native plants. Memories may be of individual plants or wildflowers (e.g. wreath flowers shown in Fig. 3); communities of plants (e.g. an everlasting field shown in Fig. 2); or a landscape, region, or broader botanical scale (e.g. the Wheatbelt or the Southwest region itself). This paper will refer to all three scales. Recollections of flora are infused with sensory overtones, and are created by bodies and emotions. Such memories are derived not solely from inner imagery but from the sensuousness of plants and places. For example, in a study of the nexus between olfaction and memory, Waskul, Vannini and Wilson (2009) observe the capacity of odors to catalyze memories through

nostalgic feelings. One respondent notes that wild roses remind her of childhood visits to her grandmother's house in Alberta, Canada, while another interviewee relates the smell of lavender to the comfort of "family, home, and safety" experienced as a child (Waskul, Vannini, and Wilson 2009, 11). These statements suggest that botanical memory may be defined as remembrance of plants through which a web of sensory, cultural, environmental, and familial memories is enlivened.

As propounded here, botanical memory derives a theoretical framework from related precedents in environmental memory (Chawla 1994); sensory memory (Seremetakis 1994); sensory ethnography (Stoller 1989, 1997; Howes 2003; Pink 2009); bodily memory (Connerton 1989; Casey 2000); community and collective memory (Boyer and Wertsch 2009; Hua 2009); and emotional geography (Bondi, Davidson, and Smith 2005; Jones 2005). This genre of environmental memory involves sensory and emotional interactions with plants. Yet, whereas allusions to memories of plants appear in ethnobotanical literature, they are nearly unheard of in emotional geography, community memory research, or ecocultural studies where, for example, research into the plants-people nexus is governed by the present tense of the ethnographic encounter (for example, Hitchings 2003; Martin 2004; Hitchings and Jones 2004; Hoffman and Gallaher 2007).

Despite the underemphasis, memories of plants strongly inform human emotional and collective cultural bonds with environments. For early travellers in Western Australia like May Vivienne (1901) or contemporary wildflower tourists to the Southwest, the memory of a place may be indistinguishable from the memory of its plants. Amateur botanist Ayleen Sands (2009) expresses the intertwining of memory and flora as she recalls her first encounter with native orchids early in her proprietorship of Stirling Range Retreat, near the Stirling Range National Park:

So we came in February, and in April one of our first orchids comes out. It's a little orchid which doesn't have a basal leaf. Someone came to the office and said to me, 'Oh, your orchids are out, did you know?' and they took me down to show me and I was absolutely rapt.

Sketched as emotion-rich memories, Ayleen's rapture exemplifies the felt engagements between people and flora. Initially, her arrival in the mountainous and biodiverse Stirling Range area from urban and suburban Perth, four hundred kilometres away, entailed anxiety about displacement: "I have to confess that I was really unhappy about coming this far away from Perth initially." Ayleen's statements recall the colonial botanist Georgiana Molloy's experience of living in the isolated settlement of Augusta, Western Australia, in the nineteenth century. For both women, wildflowers attain emblematic

significance as consolations for displacement, distance, and loss (Lines 1994). Like Molloy, through the flowering of the orchids timed to her arrival, Ayleen has developed an emotional bond and a sense of place, gestated in part by the local flora of her immediate surrounds. With relief, she describes herself now as “very comfortable with the bush. I just absolutely love it. I love the way everything is interrelated.”

## **2. A Method of Researching Memories of Plants**

This conversation with Ayleen in the field emerges from an ethnographic approach to the study of memories of Southwest Australian plants (see Ryan 2010a). Ethnography is a qualitative method used in cultural studies and the social sciences to research lived experiences and elucidate the meanings of cultural practices (for example, see Brewer 2000; Hammersley and Atkinson 2007). In particular, I employed the technique of semi-structured interviewing to bring forth and understand memories of flora in combination with my participation in wildflower tourism and botanical conservation activities to meet and establish trust with potential interviewees. My conceptualization of botanical memory—as sensory, bodily, and emotional—will be developed in this article through the analysis of seven interviews conducted during the spring wildflower seasons of 2009 and 2010 in the Southwest Australian region. Memories of plants surface extensively in these seven interviews, and are representative of the varieties of botanical mnemonics encountered during my

research: from embodied and sensory to scientific and visual. As part of a broader project on wildflower tourism and aesthetic appreciation of Southwest flora, I interviewed twelve individuals, nine of whom I met on bus tours, wildflower walks on foot—leading to interviews based on walking in the field—or by car, and wildflower shows or celebrations at community centres. I contacted three other interviewees—whom I did not meet on tours—by phone or email to set up interviews with them because of their known expertises in Southwest flora (for example, Hopper 2009). The five interviewees not referenced in this paper are excluded because they did not discuss their botanical memories in detail but focused more on local conservation efforts or regional ecotourism realities (see Ryan 2011). Semi-structured interviewing of all individuals was based on the following questions:

- How familiar are you with these wildflowers? Are they completely new to you?
- Do you know the names for these plants? Do you use their scientific, common, colloquial or Aboriginal names?
- Have you had opportunities to smell, taste, touch and listen to the plants today? What do you remember most about these sensory experiences?
- Would you describe any of the plants or places as weird, grotesque, bizarre, strange, beautiful or picturesque?

- To what extent do the plants figure into your memories of Southwest Australia? Are there any old or new memories of flora you'd be willing to share?

Interviews occurred, when possible, as “mobile interviews” conducted while walking with people amongst the wildflowers of interest or significance to them (Hitchings and Jones 2004, 8). Other interviews took place under less mobile conditions: in offices and cafes or over the phone. The semi-structured format deviated from the suite of questions above, and was normally tailored to the respondent’s expertise, interests, time, and the setting of the interview. I used a small, hand-held digital recorder to record the conversations, which were later transcribed. Each interviewee signed a letter—approved in 2009 by the Edith Cowan University Ethics Committee—granting me permission to discuss parts of the transcripts in academic publications and to name the people interviewed.

Expecting varying levels of familiarity and involvement with the flora amongst participants, I sought out individuals from five broad, overlapping categories: scientific botanists, amateur botanists, eclectic botanists, Aboriginal botanists, and wildflower tourists. Scientific botanists have had formal university training and professional experience in plant conservation (Collins 2009; Hopper 2009). Amateur botanists are self-trained experts in field botany or plant propagation who have strong site-specific, local, or subregional understandings of plant life (Collins 2009; James 2009; Nannup 2010; Sands 2009; Williams 2009).

Whereas scientific botanists tend to be specialized and more technically concise about regional scientific issues and trends, amateur botanists tend to be locally focused generalists who are attached to and well-acquainted with a particular locale or, in the case of Kevin Collins (2009), a particular genus, the banksia. Eclectic botanists, who will not feature in this paper, draw variously from scientific, humanities-based, and experiential knowledges; they are often writers or artists with a keen interest in nature. Aboriginal botanists invoke indigenous worldviews and storytelling in which sensory experience of plants mingles with spiritual and ecological meanings (Nannup 2010). Due to the sensitivity of Aboriginal knowledges of plants, I interviewed only one member of the Southwest Aboriginal community, Noel Nannup, an elder and spokesperson for the Nyoongar people. Wildflower tourists are international, national, or local visitors who may have complex understandings of plants based on the flowering times of the desirable species they endeavour to see (Alcock 2009; Sands 2009). It is important to consider that these distinctions, though useful to some extent, blur in actual practice. For example, an amateur botanist, such as Lyn Alcock, may participate in wildflower tourism when visiting a new locale or a scientific botanist, such as Kevin Collins, may have strong local affinities and be a long-term resident.

As indicated above, my conceptualization of botanical memory will draw primarily from interviews with amateur botanists and wildflower tourists. The

interviews suggest the dialectics between mourning and celebration, as well as the role of sensory memory of plants. Some conversations show significant emotional and embodied affinities, including mourning the loss of species and the homogenization of biodiverse habitats through suburban overdevelopment or invasive exotic plants. Whereas wildflower tourists tend to emphasize the beauty of flowers, local residents—who can be scientific, amateur, eclectic, and Aboriginal botanists—tend to convey a sense of despair over imperiled plant species and diminishing habitats. This is particularly the case for land owners and others who are materially attached to a specific property (e.g. James 2009). The emotion of grieving surfaces more for interviewees, such as David James (2009), Noel Nannup (2010), and Don Williams (2009), who have lived for an extended time at a locale, property, or multiple places in the Southwest region. These individuals exhibit a well-developed sense of place and have endured more long-term changes and floristic extinctions than seasonal tourists have. Indeed, interviewees do tend to construct and communicate memories differently depending on the longevity of their emotional bonds to the changing landscapes of which the plants they know are part. As a caveat, however, the firm distinction between mourning and celebration—and between residents and tourists—is fuzzy at best and emotional complexities are to be expected. For instance, long-term visitors—such as Jack and Lena discussed in the context of the Stirling Range National Park and tourism proprietor Ayleen Sands—may express emotions of loss over changes in the landscape tinged with feelings of

appreciation for the rare orchids that remain in remnant parcels of bush. Thus, for the sake of structuring the analysis of interviews, I deploy the categories of mourning, celebration, and embodiment to emphasize the themes stressed by the speakers, although these categories are not mutually exclusive.

Interviewees who are not included were perhaps less inclined to broach emotional or experiential matters when the interview format appeared formal, where trust was not developed fully, or where the paradigm of scientific objectivity—the pre-eminent discourse of botany—held back the expression of emotional bonds to flora. Such concerns should be scrutinized in further studies of ethnography as a method for researching botanical memory.

### **3. The Physiology of Human Memory**

What is the physiology of botanical memory in the context of contemporary research into memory studies, some of which emphasizes sensory or bodily memory? Memory has been well explored in literature, philosophy, and art, but some accounts of memory are acutely visualistic. Gaston Bachelard's (1971, 101) notion of "reverie," for example, entails an involuntary plummet to "the beauty of the first images," rendering the immediate world "completely colourless." Similarly, for John Dewey (1967, 154), the mind produces memory as "knowledge of particular things or events once present, but no longer so." Cognitively created, memory is an "active construction by the mind of certain data" (Dewey 1967, 157). However, rather than localized in the brain and

visually assembled, as Dewey and Bachelard's assert, memory is the somatic extension of feeling into the world (Connerton 1989; Casey 2000). We recollect plants through corporeal sensations as smells, tastes, textures, sights or sounds, as well as the rhythm of walking in botanical sanctuaries (Hitchings and Jones 2004; Ryan 2010b). Thus, bodies are physiological and emotional, as well as natural and cultural, sites of memory expression.

Research of the last twenty years in the field of memory studies argues similarly that memory is not purely a cognitive construct of psychology or history, but a multisensorial faculty of the body, environment, and culture (Connerton 1989; Chawla 1994; Seremetakis 1994; Stratford 1997; Casey 2000; Jones 2005; Boyer and Wertsch 2009; Hua 2009; Waskul, Vannini, and Wilson 2009; Hamilakis 2010). The embodied aspects of memory are particularly important to the term "memory work," introduced in the 1980s by the *Frauenformen*, a group of West German feminists interested in how various forms of femininity are imposed on female bodies (Stratford 1997, 207).

Memory work links bodily experience to memory research as a method for examining "how we are socialised [*sic*] in and through our bodies — complex sites that are 'natural', 'cultural', and intimately connected to how we experience and construct our worlds" (Stratford 1997, 214). As an interrogation of knowledge production derived through privileged scientific and social discourses, memory work entails the exploration of embodied subjectivity.

Thought to “elicit ‘only’ the anecdotal and folkloric,” place memory in this context instead provides “richly heterogeneous stories” that attain their own validity and importance (Stratford 1997, 214).

Botanical memory may also comprise bodily memories. Casey (2000, 147) defines bodily memory as “memory that is intrinsic to the body, to its own ways of remembering: how we remember in and by and through the body.” While bodily memory is based in the senses, memories of the body can often be visual because sight “subtends most acts of recollection” and “has the effect of blurring the distinction between body memory and memory of the body” (Casey 2000, 147). In *How Societies Remember*, Paul Connerton (1989, 72-73) distinguishes between “incorporating” and “inscribing” practices of memory. Incorporating practices involve transmissions between bodies—for example, smiles, handshakes, or words spoken in conversation—that occur when bodies are co-present. These practices produce “a mnemonics of the body” (Connerton 1989, 74). Thus, for example, the memorization of the correct posture for a ceremony and the subsequent transmission of a cultural practice involving that posture occur through words or gestures between people present to one another. In contrast, inscribing practices require memory storage technologies, such as books, photographs, and computers, that “do something that traps and holds information, long after the human organism has stopped informing” (Connerton 1989, 73). Yannis Hamilakis (2010, 191-192) problematizes

Connerton's categories, arguing instead for incorporating practices of memory that necessitate material culture. She cites eating and drinking as examples of mnemonic behaviors involving habits and gestures transmissible between individuals as well as the inscriptive materials of memory (i.e. the table, utensils, food, etc.). Hamilakis (2010, 192) argues that it is "time to collapse his binarism, which will also mean the collapse of his implied distinction between habitual, 'internal' memory which supposedly leaves no traces, and 'external' material memory with its associated recording devices."

The dynamics between visual and bodily memory are further taken up by some cultural scholars. The anthropologist Nadia Seremetakis (1994, 9) in *The Senses Stilled* argues that memory is not constrained to ocularcentric cognition, but is rather mediated by ongoing cultural and bodily (re)enactments:

Memory cannot be confined to a purely mentalist or subjective sphere. It is a culturally mediated material practice that is activated by embodied acts and semantically dense objects. This material approach to memory places the senses in time and speaks to memory as both meta-sensory capacity and as a sense organ in-it-self.

A material practice of memory through “semantically dense objects” reflects the notion of the indivisibility of “objects, settings, and moods” as integral to the formation of environmental memory (Chawla 1994, 1). Seremetakis’ notion of “sensory memory” augments environmental memory by emphasizing its embodied nestings. Seremetakis (1994, 9) explains that the senses and memory are coterminous and “co-mingled.” The senses coalesce to produce botanical memory, which is not purely a recitation of aestheticized plant images, constituting what Connerton (1989, 73) refers to as an “inscribing practice” of memory. Along with pictorializations, the smells, tastes, tactile sensations, and sounds of plants impart corporeal qualities to the act of remembrance (for example, Lawrence and Skinner 1924, 92-93). Paul Stoller (1997, 85) also suggests that “the human body [and non-human bodies, I would add] is not principally a text; rather, it is consumed by a world filled with smells, textures, sights, sounds and tastes, all of which trigger cultural memories.” Sensory research into cultural practices, for Stoller (1989, 8), entails a post-Kantian critique of the alignment between vision and reason characteristic of much ethnographic writing. Research into human sensory experience in its fullness attends to “the sensual aspects of the field,” making us “more critically aware of our sensual biases and [forcing] us to write ethnographies that combine the strengths of science with the rewards of the humanities” (Stoller 1989, 9).

Memory furthermore engages collective abilities to interpret embodied events and experiences. Hence, memory is not only the experience of a body in a place but of bodies in places; the content of memory varies with collective cultural meanings and values. Whereas individual memory is accepted in psychology and physiology, collective memory has been introduced relatively recently into human geography, cultural studies, sociology, and anthropology to describe memories held in common by a community or social group (Boyer and Wertsch 2009; Hua 2009). Collective memory “requires a public re-interpretation of personal memories that are placed at the service of the collectivity” (Hua 2009, 137). Boyer and Wertsch (2009) observe that collective memory’s primary shortcoming is its assumption of monolithic collectivity in the form of homogenized countries, communities or social groups. Collective memory raises the question of “whose voice, experiences, histories and personal memories are being forgotten” by the community, institution or nation (Hua 2009, 137).

Memory may be bodily and collective as well as emotional and topographic. Collective memory, in particular, offers interesting intersections with emotional geography, a field which attempts to understand the spatial aspects of memory and its associations with environments (Bondi, Davidson, and Smith 2005). The emotional content of memory suggests that “memories always will have a spatial frame (even if it is unremembered or latent) and they will be always

emotionally coloured in hues ranging from pale to vivid” (Jones 2005, 210).

Emotions construct how people make sense of the natural world through memory. Jones (2005, 207) argues that the call towards emotion in landscape research is

part of the movement away from the claim that knowledge is, and should be, an abstract, disembodied, purely rational and objective construct. It recognises [*sic*] the role of emotions in the *construction* of the world, and in *interpretations* of the world [*italics in original*].

Emotional geography responds to the objective imperatives of empirical research by expressing “something that is ineffable in such objectifying languages, namely a sense of emotional involvement with people and places, rather than emotional detachment from them” (Bondi, Davidson, and Smith 2005, 2). Urry (2005) further argues that the emotions of place have been given visual form through modern ocular technologies. In the middle nineteenth century the language of the Claude glass, sketching, and photography spurred a “particular visual structure to the emotional experience of place” (Urry 2005, 78). Indeed, when conceptualized as landscape, place and its associated emotional hues assume a visual structure. Stephen Daniels and Denis Cosgrove (1988, 1) define the term “landscape” as “a cultural image, a pictorial way of representing, structuring or symbolising surroundings.” An

iconographic orientation toward landscape values images of places and historically conceived such “pictures as encoded texts to be deciphered by those cognisant of the culture as a whole in which they were produced” (Daniels and Cosgrove 1998, 2).

Yet, not solely a space or landscape demarcated by sight, place is a sensory and corporeal topography. Sensory scholarship of the last twenty years in the anthropology of the senses recognizes this complexity and responds to the historical hegemony of vision in structuring sense of place and human perception (Stoller 1989, 1997; Synnott 1991; Classen 1997; Howes 2003; Hamilakis 2010). This scholarship acknowledges the importance of the senses to human experience and stresses that cultural research should acknowledge the body as a sensorium in which sensory interplay molds cultural values and practices. Sensory experience, as such, is “the basis for bodily experience. We experience our bodies—and the world—*through* our senses [italics in original]” (Classen 1997, 402). In *Sensual Relations*, David Howes (2003, xi) argues that sensation is a cultural milieu and that, in preferencing vision, Western anthropologists of the twentieth century also tended to study each of the five senses in isolation “as though sight, hearing, smell, taste, and touch each constituted a completely independent domain of experience.” Howes (2003, xi) suggests that dynamics between the senses create culturally important “combinations and hierarchies” of sensory experience and expression. In

contrast, ocularcentric research obscures “sensory meaning—the associations between touch and taste, or hearing and smell—and all the ways in which sensory relations express social relations” (Howes 2003, 17).

#### **4. Botanical Memory at the Intersection of Embodiment, Environment, Emotions, and Ethnography**

When from a long distant past nothing subsists, after the people are dead, after the things are broken and scattered, taste and smell alone, more fragile but enduring, more substantial, more persistent, more faithful, remain poised a long time, like souls, remembering, waiting, hoping, amid the ruins of all the rest; and bear unflinchingly, in the tiny and almost impalpable drop of their essence, the vast structure of recollection.

Marcel Proust (1913/2008, 30)

Proust argues that smell and taste affect memory with particular poignancy and primeval endurance. As such, memory not only comprises a visual theatre, but a sensory interweaving of tastes, smells, tactile sensations, sounds, and visible features. Jonah Lehrer (2007, 80) argues that “one of Proust’s deep insights was that our senses of smell and taste bear a unique burden of memory.” The potent connection between smell and memory, exemplified by

Proust, has a physiological basis and has often been labelled the “Proustian hypothesis of odor memory” (Engen 1982, 98). Receiving brain stimuli in the form of odors, the olfactory system of mammals regulates and integrates emotional responses, social behaviors and bodily memories (for example, Engen 1982, 25-29, 97-112; Engen 1991; Herz and Cupchik 1995; Lledo, Gheusi, and Vincent 2005). In this passage from *Swann’s Way*, Proust articulates the phenomenon of odor recognition or “knowing that an odor being experienced is one that was experienced on a earlier occasion” and, importantly, he intimates the possibility of odor recall, debated amongst physiologists and defined as the bringing back of “odor sensations from memory storage without any external aids” (Engen 1982, 14-15).

Extending Proust’s metavisual mnemonics and the strong association between smell and memory he describes in particular, botanical memory can be said to comprise sensory, bodily, and emotional modes of remembering. Botanical memory goes beyond the individual psyche and the imagistic proclivity of the aesthetic imagination. Anh Hua (2009, 137) characterizes memory as “a construction or reconstruction of what actually happened in the past,” but memory in practice is a composite of bodily experiences and sensations, mental images, cultural values, and environmental stimuli in addition to a chronology of occurrences. Indeed, memory is beyond individual capacities and faculties. It invokes collectively all mnemonic modes to produce “tangled memory” in which

collective desires and needs are expressed (Hua 2009, 139). Hence, memory is a nexus of environmental, social, and personal factors, rather than purely a mental function of recall.

Chawla (1994, 1) defines environmental memory as the convergence of the natural world, poetic deliberation, and childhood memory, including:

all the fittings of the physical world that surround us: the natural world of animal, vegetable, and mineral, and the built world of human artifice. Its scope covers three dimensions of perception: individual objects; settings such as home, city, and region; and global moods or feelings for the world. These three dimensions—objects, settings, and moods—may be isolated for study, but in lived experience they are inseparable.

Emotional responses to a landscape constitute environmental memories of particular natural and cultural phenomena. Memory and emotions, or moods, are inseparable; environmental memory develops from a stratum of feelings held in the body. So, in addition to temporal, spatial, and material memories aligned to the processes of thinking, the content of memory is a sensory and emotive scape, or an “emotional geography.” Liz Bondi, Joyce Davidson, and Mick Smith (2005, 3) further characterize the central aim of emotional geography as endeavoring “to understand emotion – experientially and

conceptually – in terms of its socio-*spatial* mediation and articulation rather than as entirely interiorized subjective mental states.” Transcending individual cognition and the construction of memory as the outcome of the rote processes of the brain, memory is influenced by society and space, culture and landscape, collective and personal proclivities. Reflecting Chawla’s claim for the indivisibility of “objects, settings, and moods” as unified lived experience, memory is an anatomical topography, orchestrated by cultural and natural cues. As the interview process reveals, memory may be said to live, particularly when spoken and when embodied.

Research into the embodied, emotional, and environmental aspects of memory is well-suited to the narratives that come out of interviews. Memory narratives may emerge from the process of ethnography when interviewees are given space to reconstruct their sensory or emotional memories through a semi-structured or open-ended format (Brewer 2000, 63-66; Hammersley and Atkinson 2007, 97-120). Indeed, the exploration of memory is amenable to inscriptive forms, including interview transcripts, that record memory (Jones 2005), but the movement between the incorporating practice of the interview, especially one in the field with the interviewee, and the inscribing practice of the transcripts exemplifies Hamilakis’ (2010, 192) call to “collapse” Connerton’s binarism between the two. Working with interviews and transcripts prompts reflexivity between incorporating and inscriptive practices of memory. The

connection between memory and ethnography is emphasized by anthropologist Johannes Fabian (2007, 132) who observes that ethnographic investigation inherently probes human memory: “cultural knowledge, once articulated, is memory-mediated.” In other words, the process of speaking during an interview is naturally an invocation of remembering. Fabian (2007, 132) asserts that “memory makes articulation possible whilst also coming between the person and the statement.” Memory is often an unavoidable mediating formation in ethnobotanical interviewing in which usage or significance of plants is compiled from the recollections of the interviewee (for example, Martin 2004). During an ethnobotanical interview, plant specimens, images or other cues can be used to “jog interviewee memory” about actual plants in the field and to access information about the cultural uses of flora (Hoffman and Gallaher 2007, 203).

An interface with memory through the interview process prompts questions of how memories are expressed and what values inform their communication. The accounts of botanical memory produced during an interview could entail a series of visual images, a recounting of bodily sensations, or a chronological recitation of events devoid of emotional context. But how does the interviewee feel about an experience of plants? Is there an emotional or sensory narrative behind the facts or the timeline of experiences? For the purpose of sensory plurality in the interview process, anthropologist Sarah Pink (2009, 2) points to the growing literature of multisensorial ethnography. The term “sensory

ethnography” is defined as “a process of doing ethnography that accounts for how this multisensoriality is integral...to the lives of people who participate in our research.” Reflecting Seremetakis’ (1994) conceptualization of memory, multisensorial ethnography assists researchers in understanding “the meanings and natures of the memories that research participants recount, enact, define or reflect on to researchers” (Pink 2009, 38). The research discussed thus far collectively suggests that memory is more than a series of images recalled cognitively. Due to the heterogeneous ways in which human memory can be approached, botanical memory considers these multiple aspects. Crossing into embodiment, environment, and emotions, botanical memory encompasses feelings and facts about plants, particularly with the use of ethnography to bring forth accounts of engagements.

### **5. Botanical Memories Of Mourning: Biodiversity, Beauty, and Grieving**

As both collective remembrance and embodied subjectivity, memory intersects with emotions and place (Jones 2005). Mourning in particular may form an emotional node between people and places in response to what Porteous (1989) terms “topocide” or the annihilation of place, and what Giblett (1996) calls “aquaterracide,” or the killing of wetlands. Glenn Albrecht (2010, 227) defines solastalgia as “the pain or sickness caused by the ongoing loss of solace and the sense of desolation connected to the present state of one’s home and territory.” While emotional in quality and tone, the statements of loss conveyed

in interviews are not necessarily embodied evocations that point to a visceral absence in the felt worlds of the interviewees. Multisensoriality may be evident, but respondents also tend towards chronologies of despair or narratives of loss: a sequence of events set in temporal, rather than in embodied, space.

Themes of loss are evident in an interview with David James (2009) of Forrestdale, Western Australia. Born in the early 1950s, a passionate activist and self-trained botanist, David has lived near Forrestdale Lake all his life. Forrestdale Lake is located on the Swan Coastal Plain, shared by Perth, and protects numerous indigenous animals and plants (Giblett 2006). Nearby Anstey-Keane Damplands is one of the most botanically significant places on the Swan Coastal Plain and more diverse than the popular Kings Park, adjacent to Perth Central Business District (Giblett and James 2009) (Fig. 1). It lies at the northern tip of the Pinjarra Plains, a system of flat damplands—moist, shallow sinks—including the most suitable soil on the Swan Coastal Plain for pasture and development (Beard 1979, 27). A member of multiple local conservation organizations, David expresses exasperation over the seemingly insurmountable pressures on the bush exerted by development in his area. Forrestdale Lake Nature Reserve and Anstey-Keane Damplands constitute “emotional geographies” for him, linked to conservation agendas in the rapidly suburbanized southern areas of Perth. When asked about his local efforts, David responds that he spends “more time trying to protect wildflowers than

actually going out trying to enjoy them for what they are.” His involvement with different organizations dedicated to preserving native habitats is “a period of—shall we say—activism [with] organisations that are actually trying to preserve the environment.” Activists, such as David, exemplify commitment to preserving a sense of place connected to the protection of floristic character.

During David’s childhood in the 1950s, the bush seemed limitless and immune to modern suburban expansion: “we’d walk through bush to catch the school bus.” His memories convey a perception of the flora as all-encompassing. The abundance of the bush intermingles with recollections of the encroachment of development and attendant emotion of powerlessness:

In those days, the bush was everywhere. Nowadays, you realize how threatened it is, but in those days, it was common. We’d walk through bush to catch the school bus. We took it all for granted. Even in those days, people were destroying bushland but, because there was so much, as a kid, you just accepted it.

David’s recollections reveal how botanical memory marks the gradual transformation of the land by the juggernaut of modern progress. His childhood reverie has been displaced by an anxiety over the manifold threats to the local landscape, compelling him to align with conservation initiatives:

What we took for granted is now threatened by housing, expansion of agriculture and roads. The piece of bush that we took for granted as kids is now being threatened and it's a bitter shame because now I spend more time trying to protect wildflowers than actually going out trying to enjoy them for what they are.

David's interview exemplifies botanical memory as a reservoir of emotions about nature. Moreover, the memory narratives of amateur botanists and local conservationists like David can impart a sense for the scale of change. For example, the proliferation of exotic species on road verges is a distinct difference: "Years ago roads were narrow and roads with vegetation in good condition was quite normal." His recollections evidence the progressive incursion of exotic plants on the west side of Forrestdale Lake and the gradual disappearance of certain orchid species. These distinctive intrusions to the composition of the landscape near his home have occurred during his lifetime:

Nowadays this side of the lake's pretty much weed infested but in those days the weeds weren't quite so bad. We used to get orchids growing alongside the road here, spider orchids and different species growing amongst the weeds.

Slow-growing plants, such as banksias and the zamia palms, have been severely affected by development of bushland areas like Anstey-Keane Damplands and Forrestdale Lake (Giblett 2006). According to his direct observation, the climax character of the bush has been permanently altered, despite claims about the regeneration of the bushland by replanting:

After thirty or forty years, it looks quite natural, but believe me, if you went back before that, there was a lot of big stuff in there. But that won't be seen again in our lifetime because you need five-hundred years to grow big zamia palms or big banksias.

Here, David evokes one of the distinguishing qualities of the Southwest flora: its ancientness and slow-growing tendencies (for example, Breeden and Breeden 2010). Certain plants require hundreds of years to reach a mature state, posing an amplified sense of loss comparable to the emotional debates surrounding the clearing of old-growth forests (for example, Humphries 1998).

The emotions surrounding mourning are further elicited in an interview with Nyoongar elder Noel Nannup (2010). From 1978 to 1989, Noel served as a National Parks ranger and became the first Aboriginal head ranger in Australia. Noel recalls the destruction of native vegetation near Geraldton that he witnessed as a child. He expresses a "mixed" emotional state of despair over

the clearing of a million acres a year and affection for the botanical heritage of his birth region:

When I say mixed, I mean loving it and watching it get smashed to smithereens as they cleared a million acres a year during the 60s and the 70s. That's heartbreaking. And the old man says, "This is Australia's greatest asset, its natural vegetation and look what we're doing to it" as we followed the bulldozers along around places like Dalwallinu, Wongan Hills, Ballidu, Talingeri, to 'round that country there. We were sad to watch it.

The loss of native plants is more than an ecological abstraction, but has cultural and spiritual ramifications. Noel expresses being torn between affinity for the plants that are his totems and dismay over the onslaught against native bushland, and hence against Aboriginal spirituality, as the two are consanguineous (for a discussion of Australian Aboriginal relationships to land, see Rose 1992; Graham 2008). He says:

But I've always had that, you know, tried to balance that. How do you cope, when your dad's telling you that these things are our totems and yet we're watching them get smashed to bits.

As with David James, Noel's memories track changes in the character of the Southwest landscape. Near Geraldton, plant biodiversity occurred along railway lines and road verges before the introduction of herbicides and developments in motorized technologies that impacted species such as the more prominent everlastings:

I used to ride a pushbike from Geraldton out along the railway lines towards Mullewa. In those days they didn't use a lot of herbicides and sprays, and all the wildflowers were still there, including big pink everlastings. You'd watch them from little plants that come up, grow, and flower in the railway line. They started to bring out an X-class diesel which didn't have spark arresters on it. The railways had to burn. You'd watch the burning and you'd know that the seeds of the everlastings were all getting burnt. And because they burnt them all the time, some of them coped and some didn't.

This statement points to the heterogeneous quality of botanical memory, comprising emotional impressions of plants linked to memories of childhood, communities, and changes to each.

For Noel, everlastings also prompt associations with family and place.

Memories of pom-poms (Fig. 2) call to mind his father who taught Noel to snip the stems and preserve the flowers in hot wax:

There used to be pom-poms, little round ones, just north of Three Springs, near Arrino, and also in Coalseam [Conservation Park] at Mingenew. There's still a lot of them there but they're little ones. I'd always cut them into bunches and put rubber bands on them. Dad always said, 'if you want them to last a long time, snip them off and dip them in hot wax'. That seals it. Then your flowers stay colourful for a long time.

Noel's recollection of flowers near Mullewa affirms the mixed quality of the botanical memory of someone with a lifelong history in a place. Memories of plants can be concurrently of wonderment and loss over the destruction of a place. Whereas the colours of the pom-poms would last indefinitely, the wreath flower was notably evanescent and delicate. Noel associates the rarity of the wreath flower with the mining of Talling Peak where he recalls that the flower grew:

They were rare. I remember if you picked those, by the time you stood up after you picked one, it started to wilt. Talk about an amazing flower. Just pick it up and it's gone, it's finished. But they were up around

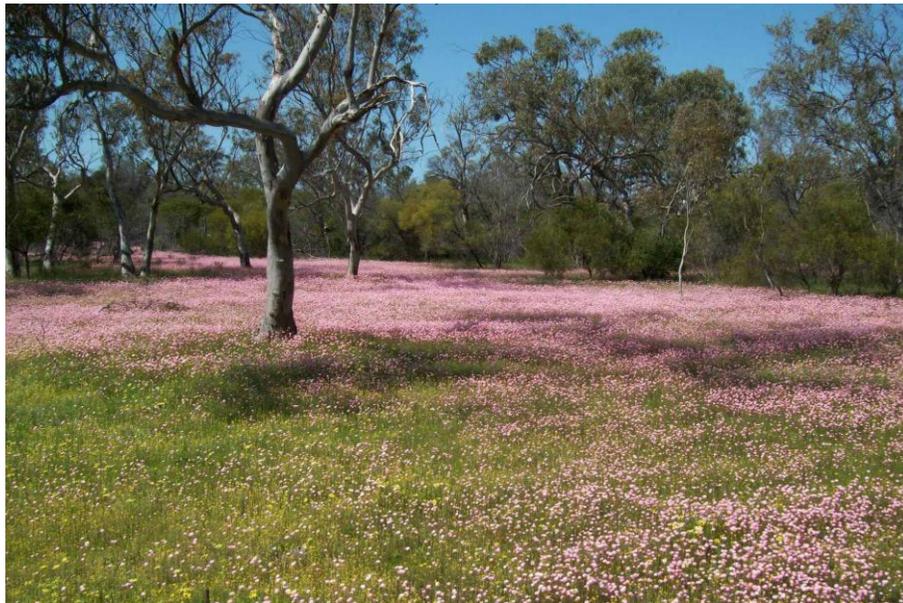
Mullewa, north of Mullewa and Bullardoo Station. There's a big hill there. It was iron ore, sadly, and they loaded it onto trucks and railway lines and carted it away. Tallering Peak was a really important place.

Memory itself is ecosystemic. Southwest plants instigate recollections of birds and the broader landscape, reflecting the concept of environmental memory posited by Chawla (1994, 1) as encompassing natural “objects,” landscape “settings” and emotional “moods.”

The notion of ecosystemic connectivity as integral to botanical memory and mourning is referenced by conservationist and proprietor of Hi-Vallee Farm in Badgingarra, Western Australia, Don Williams (2009). He implies ecologically integrated mourning, in which the loss of one species has larger consequences for the biotic system of which it is part, including other animals, insects and plants:

No one can put a value on individual species. Some people will say if we lose it, it doesn't matter, more will evolve. It would appear that they won't evolve as quickly as we can wipe them out. What a lot of people forget is that if you lose a plant species, you could lose an animal or insect species. And a lot of the orchids have evolved around one individual insect which pollinates them.

The exploration of memories of plants unavoidably confronts mourning the loss of biodiverse habitats. All three interviewees have been life-long residents of the Southwest, and have thereby engendered emotional attachments to plants through regular exposure to the land and immersion in the depths of the botanical integrities of their respective places. All have been involved in conservation efforts. Although their responses shift between lament and celebration, their long-term perspectives on the Southwest express a startling sense of the bush in transformation by social and environmental pressures of suburban development, pesticides, technology, and mining.



**Fig. 2. Pink Everlastings in the Eneabba Region of Western Australia.** The common name “everlasting” denotes various species of the cosmopolitan Asteraceae family, such as the pom-pom head (*Cephalopterum drummondii*). (Photo by the author)



**Fig. 3. Wreath Flowers in the Northern Wheatbelt Region of Western Australia.** With a genus name celebrating the French botanist Jean Baptiste Leschenault de la Tour and a species name derived from Greek for “large flower,” wreath flowers (*Leschenaultia macrantha*) are prostrate-growing plants endemic to the northern Wheatbelt areas near Mullewa and Perenjori. (Photo by the author)

## **6. Botanical Memories Of Celebration: Orchids, Love, and Rapture**

Whereas botanical memory may be characterized by mourning, it may also express the emotions of celebrating flowering beauty. Wildflower tourists such as Lyn Alcock (2009), originally from the Eastern States of Australia, emphasize the beauty and awe-inspiring qualities of native Western Australian plants. They do recognize the threats to botanical diversity, but more tangentially than David James, Noel Nannup, and Don Williams. Of all the Southwest plant species, Lyn is passionate about orchids and dryandras. When

I asked her about the attractiveness of orchids, she relays her first memory of encountering wild-growing orchids in the Murchison River area after having first grown them in her home:

I think I had been given some *Cymbidium* bulbs at home and started growing orchids. Then, ten years ago on our first trip, [my husband and I] were travelling up north around the Murchison River area. I came across all these tiny little orchids about ten centimetres high. They were in a mass like the little snail orchids we saw this morning. For some reason they just grabbed me and I said 'Wow, these are amazing!'

For some flora enthusiasts, the promise of spotting rare or elusive iconic species can invigorate botanical passions. When I asked about which orchids she feels particularly drawn to, Lyn reflected on the characteristics of rarity and visual strikingness. A beautiful and hard-to-find localized plant, such as the Queen of Sheba (*Thelymitra variegata*) or the winter spider orchid (*Caladenia drummondii*), is a peak moment for an ardent wildflower aficionado:

Obviously the Queen of Sheba because it's such a spectacular orchid. Just recently, we were up at Kalbarri and I saw a little orchid I thought I would never get to see. It's called the Winter Spider Orchid. It's a very tiny orchid, which only occurs mid-winter. And because it's not very

common I never thought I'd see it, but I was walking through the bush and there it was.

Similarly, the uncommonness of the Western underground orchid (*Rhizanthella gardneri*), with only two hundred and twenty recorded sightings, impacts the intensity of her recollection. As an orchid enthusiast, the underground orchid holds a prominent position in Lyn's memory, as well as the botanical imagination of the Southwest region. First identified by its sweet smell in 1928 by John Trott on his farm near Corrigin, Western Australia, the white leafless orchid is perhaps the rarest endemic plant species in the state and is known to occur in only two locations in the Southwest. Lyn relates the delicate tactile memory of digging through the soil to unearth the extremely unusual, and very easily disturbed, subterranean species. The orchid requires a mutualistic relationship with the broom honey-myrtle or broom bush (*Melaleuca uncinata*) to survive. Lyn summarizes:

My most amazing sight has been the underground orchid. Because it only ever grows underground, you have to have sand for it to grow. You have to have a particular type of broom bush that it seems to grow with, and you of course have to have the fungus that stimulates this orchid. So you have to have all these three things. It grows very near the roots of the broom bush, but you could look under the roots of a thousand broom

bushes and you won't find one. It won't be the thousandth that it's under. Yes, I was taken, there were three of them all growing in a similar spot. And for me that was absolutely spectacular. It grows under leaf litter, and so you need to pull the leaf litter apart very, very carefully and then the flower is just sitting below the leaf litter, and then slowly excavate it, very carefully, very, very carefully.

Digging through the leaf litter and slowly excavating the flower of the underground orchid are “sense making rituals” (Waskul, Vannini, and Wilson 2009) that invoke incorporating practices of memory—here between plants and people—and sensory recollection. The memory of the orchid is intrinsically bound up with the tactile and olfactory practice of exhuming it in order to momentarily see it. As collective or cultural memory (Hua 2009; Boyer and Wertsch 2009), the unearthing of the flower is practiced by anyone who wants to claim the experience or participate in exposing it. Other than digging through the leaf debris, there is no way to perceive the orchid. The action of pulling the leaf matter apart very carefully becomes part of a practice shared collectively by orchid enthusiasts, as part of the cultural network of memory surrounding the plant.

Orchids furthermore play a significant role in the formation of sense of place for Ayleen Sands (2009) of the Stirling Range Retreat who recounts her first

spring in the area through her experiences of learning the orchid species of her property. The mountainous Stirling Range National Park consists of about one-thousand and five hundred plant species, or about one-third of the flora in the Southwest, including eighty-seven endemic species dispersed throughout five main botanical communities (Keighery and Beard 1993). Her sense of place has developed through the progression of time synchronized to the flowering of orchids:

In May someone came to the office and asked me, ‘did you know your Hare Orchids were out?’ I said, ‘ooh, Hare Orchids, have we got Hare Orchids here?’ Off they took me. They showed me hundreds of orchid bed basal leaves of the little Hare Orchid, so I began to think, ‘oh, this is quite an important place’.

Like other self-trained botanists, Ayleen learned through the tutelage of more experienced local orchidologists. The local transmission of botanical knowledge may occur as a type of informal apprenticeship based on experiential and verbal guidance by mentors:

In August, a lovely couple named Jack and Lena came. They were both in their late seventies. We introduced ourselves. ‘My name’s Lena, and my

husband's name is Jack, and we've been coming here for thirty years'.

And I said, 'you must love it'. 'It's the orchids we love', she said.

As mentioned also by Lyn Alcock, the Queen of Sheba is a sought after orchid for its iridescent visual wonder. Ayleen recalls her ecstatic first encounter with "the Queen" as a ceremonious baptism into the natural world of the Stirling

Range:

A day or two later they both bounded in with big smiles on their faces and said 'The Queen's out. You'll have to come and see the Queen'. And I asked, 'what's the Queen?' And they both were stunned. So off I went with them and I found the Queen.

Ayleen's memories of the Queen of Sheba orchid are highly associated with interpersonal memories of Jack and Lena, demonstrating that botanical memory crosses into the natural and cultural worlds and that memories of plants are not merely of plants alone. A larger narrative of cultural memory contextualizes the orchid flower in a network of social relations.

For Lyn Alcock and Ayleen Sands, the celebration of the Southwest flora emanates from appreciation of visual beauty embedded in personal accounts of acquainting themselves with their places, as well as collective memories that

are shared by a community of wildflower enthusiasts. Revealing human topographies of the plant world, botanical memory may consist of such storied engagements with plants. The interviewing of people in communities, therefore, is an integral approach for eliciting the emotional and multisensorial content of human memories, for tracing the landscapes of emotions and remembrance in the Southwest. However, in my sample of interviewees, memories of celebrating wildflowers tend to characterize the experiences of itinerant interviewees whose sense of place is nascent and for whom the notion of topocide (Porteous 1989) may go unregistered because of affinity with legally protected reserves where pressures are diminished. For Ayleen and Lyn, orchid flowers are cause for celebration because of their rarity, colour, and delicate structure, as well as community knowledge of orchids provided by senior figures like Jack and Lena. Botanical memories may consist of storied engagements based in emotional absorption or corporeal involvement, but may also be distanced from concerns of habitat destruction or, in the case of the Stirling Range, alarming rates of plant disease. Further studies of botanical memory should focus on the dynamics between the closely related emotions of mourning and celebration environments.

### **7. Botanical Memories of Embodiment: Sucking Banksia Nectar**

Botanical memory influences how people construct a sense of place through multisensorial interactions with the living landscape. However, sense

experience may be rendered non-corporeal through the construction of remembrance as a procession of images rather than bodily and sensory memory (Connerton 1989; Casey 2000). Although vision is integral to the process of recollection, memories of plants may be rich with sensation. In practice, Kevin Collins (2009) of Banksia Farm in Mount Barker, Western Australia, exemplifies the conceptual frameworks of sensory ethnography (Stoller 1989, 1997; Pink 2009), sensory memory (Seremetakis 1994), and bodily memory (Connerton 1989) as constitutive of botanical memory. His embodied approach to educating the public about the flora of the region uses incorporating practice as one strategy for engendering appreciation of plants. This section details an autoethnographic approach to botanical memory, tracing my generation of bodily memory through multisensorial interaction with native Southwest flora on Kevin's farm.

Kevin and his family bought the property that is now Banksia Farm in 1984 and began planting banksias a year later. By 1987, thirty species had been planted. In ensuing years, the family completed a collection of all seventy-six species while developing overnight facilities for visitors. His interest is a long-term passion for propagating and cultivating banksia:

We thought to ourselves, well we've got thirty species and there's only seventy-six, so let's keep going. It became an obsession and drove the

kids barmy, driving up and down looking for banksia seeds. In fact we flew to Cairns [in Queensland] to get the last species which grows on Hinchinbrook Island.

Kevin draws from botanical science, Aboriginal bushtucker knowledges, and actual bodily contact with seeds, flowers, and leaves to foster appreciation not solely hinging on detached perception of flowers as aesthetic objects. For instance, the checkerboard symmetry of the banksia flower head consists of thousands of tiny flowers, which he encourages me to experience through touch: “So there’s thousands of flowers in there and they’re always in that pattern. Touch some of the little buds, run your fingers up the flower stalk and go down.” Kevin’s approach to the wildflower tourism public is the interactive and corporeal generation of botanical memory.

Half of my interview with Kevin occurred as a “mobile interview” (Hitchings and Jones 2004, 8) as we walked amongst his collection of plantings (Fig. 4).

Participation in the learning act involved tasting the nectar of the banksia flower and eating its nutty seeds. The ritualistic aspects of plant encounters recur as Kevin advised me to pluck the nectareous flower bunches and suck out the sweet liquid, then put a flame to the seeds to roast them before eating:

There are plenty of flowers. Get one on a bending stem at the base and pull out the recently opened ones. Pull out a handful while you have them, chew them and you will have sucked the nectar like Aboriginal people did. You can eat the seeds. They are delicious. Usually we put a flame on them just to take the kernel off but just try chewing. They are a little bit like a peanut and quite nutty.

This passage expresses physical encounter involving gestural language; pull, chew, suck and eat are actions necessitating the closing of distance and the removal of the sensory distance associated with taxonomic knowledge. Kevin interfaces with plants with sensorial openness and abandonment. Although scientifically competent, his knowledge is partly imbued with the sensation of contact:

This one smells quite sweet. You have to put your nose right into it. As kids we would part the flowers, poke our tongue in there and suck the delicious nectar from the flower.

Recollections may be sense-rich, expressing the assertion by Seremetakis (1994, 9) that memory is a “culturally mediated material practice that is activated by embodied acts.” Memory of sweetness crosses into smell and taste actively constituted by the diction “poking” and “sucking,” implying an

intimacy with his plantings. He further encourages me to “squeeze,” “chew” and “suck” the flowers to draw out the sweet nectar:

Sometimes you can just squeeze them and see little balls of nectar come up. There’s one in the middle there that’s showing. But just chew the yellow bits, suck it and you should get a little bit of nectar.

Odors also shape a visitor’s experience when, for instance, Kevin points out the smell of boronia, one of the characteristic fragrances of the native Southwest vegetation: “This is boronia. One of the highly aromatic plants. Just have a smell of that.” References to modern taxonomic nomenclature commingle with his treatment of ancient aromatic qualities of the cosmopolitan Rosaceae family of which boronia is part:

Boronias are in the Rosaceae family and all Rosaceae have highly aromatic foliage. Not only aromatic flowers but aromatic leaves. This is another Rosaceae. And this will be a little bit different. But they’re all very aromatic plants.

Kevin bridges seamlessly the technical language of scientific botany and the sensuous language of bodily experience in a manner similar to nineteenth century American writer and naturalist Henry David Thoreau (1993, 2000) and

Australian place writers such as Edmund Banfield (1968). Sensory practice subtends his understandings of plant ecology:

Feel how soft they are and put your head near one of these flowers. Very few banksias are aromatic. And these are pollinated by moths. See those tiny little pollen presenters. They're very close together. They're very thin and the little moths push in to suck the nectar to pollinate this one.

He hybridizes scientific facts with embodied experience, emphasizing material human and non-human interdependencies. Also featured at Banksia Farm, dryandras offer possibilities for multisensorial involvement with visitors, affirmed by the appellation "honey pot flowers:"

Most of the dryandras that have their flower seeds just coming into bud have what we call 'honey pot flowers'. And when those little loops come out you can put your finger in there and just lick the nectar off.

This mobile interview with Kevin Collins occurred at the crossroads of botanical science and human corporeality. As sites of memory expression, bodies mediate the natural and cultural worlds (Giblett 2008). Smells, tastes, and textures undergird abstract scientific explanations that may seem meaningless

or irrelevant to wildflower tourists. Incubated in the fibres of the body, memories of plants gestate ongoing re-enactments of sensoriality.



**Fig. 4. Menzies' Banksia (*Banksia menziesii*).** With common names such as firewood banksia and flame banksia, Menzies' banksia is known for its quick-burning timber. (Photo by the author)

## **8. Conclusion**

I have advocated in this paper a sensory and emotional approach to the study of botanical memory, just as Classen (1997, 410) outlines the timeliness of “a sensory approach to culture” through an anthropology of the senses. Memories of plants are inextricably tied to the complexities of the human faculty of remembrance and its sensory and emotional aspects. As an area of potential

research into human-plant interactions, botanical memory represents a poignant component of environmental memory that is intimately related to the flora of diverse scales of place, from locales to regions. The beginning of this paper outlined various memory frameworks including sensory memory (Seremetakis 1994), body memory (Connerton 1989; Boyer and Wertsch 2009), collective memory (Hua 2009), emotional geography (Bondi, Davidson, and Smith 2005), and environmental memory (Chawla 1994) to show potential directions for botanical memory research and to establish the modes through which plant enthusiasts wend during the act of recollection. Through readings of excerpts from interview transcripts organized under the overlapping categories mourning, celebration, and embodiment, I have argued that botanical memory may be multisensorial, emotional, and place-specific, but more typically alternates between these various mnemonic modes. Indeed, it is more germane to consider a plurality of botanical memories reflecting cultural and place values, rather than to conceptualize memory as a homogeneous discourse shared by people who interact with flora in a particular locale or region. Botanical memories reflect personal and collective proclivities, values, and dispositions towards plants and places.

Different kinds of interviewees have been presented: wildflower tourists and proprietors involved in the consumption of wildflower tourism or the provision of tourism services (Alcock 2009; Sands 2009); scientific botanists and

horticulturalists who can control, within limits, the health and longevity of their plant collections (Collins 2009); and long-term Southwest residents turned conservationists who have witnessed the destruction of plant biodiversity first-hand (James 2009; Nannup 2009; Williams 2009). As an educator, Kevin Collins could be considered a facilitator of botanical memory involving the senses. The experience he allows for visitors galvanizes the multivalent capacity of memory for sensorial content, but his interview largely excludes feelings or “moods” that foster emotional attachments to flora. Lyn Alcock and Ayleen Sands, on the one hand, express celebratory emotions of flowers fixed firmly in their personal stories but missing the technical specialization of Kevin Collins or the comfort he displays with sensory immersion in the botanical world. David James, Noel Nannup, and Don Williams, on the other hand, refer to attachments to place through memories of flora reflecting a sense of mourning as plant populations vanish.

In a rapidly changing place such as the Southwest of Western Australia, the study of human and plant interactions is a much-needed complement to botanical conservation research. Increasingly, the region’s native flora exists as remnant pockets within agricultural, pastoral, industrial, or suburban places. As actual plants become less common, so do memories of those plants; memories which contain rich emotional and sensory narratives with the power to instill in others the emotions of appreciation, wonder, and dismay. The

botanist Stephen Hopper (2009) affirms this in saying “When I grew up, having a patch of bush in the backyard or close enough within walking distance to the city was normal. Increasingly, as areas of bushland diminish and the city expands, that experience is on offer less and less. So, I think this is where we have to be vigilant and continue to celebrate Western Australia, what’s special about it.” An integral part of celebration and its obverse, mourning, is the faculty of memory in all its diversity.

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