

Interviewee: Ted Edwards (AM)

Timed summary: Ted Edwards interviewed by Mary Hutchison

Date: 15/11/2021

Session #1

Time	Subjects	Names – people and organisations
00:00:00	Introduction. Overview work at CSIRO from 1970. Relationship between CSIRO and Black Mountain	
00:01:09	Pre 1970 moth research Black Mountain. Light trap collection. Ted's follow up work from 1970	Ian Common, Murray Upton, National Insect Collection
00:03:10	Growing up on vineyard at Menangle Park. Early interest in butterflies. Relationship between moths and butterflies.	
00:06:28	Early interest in butterflies. Learning by rearing them. Knowledge of botany through butterflies. Life histories of living things.	Biology, sedges, mistletoes
00:09:47	Education at agricultural high school. Science degree at Sydney University majoring in agronomy. Issue of future employment.	Agricultural Department Traineeship, CSIRO, Deniliquin, Yanco, pasture agronomist
00:12:53	First connection with CSIRO late 1960s. Its ethos. Employment at CSIRO as Experimental Officer.	Ian Common, lepidopterist, National Insect Collection
00:15:24	Moth collection on Black Mountain by CSIRO. Use of mercury vapour light moth trap. Ted's work on checklist of moths in Australia.	Taxonomy, Ian Common, Ebbe Schmidt Neilsen
00:19:50	Moth species on Black Mountain. 'Hairy- headed Black Mountain Moth'. Detective work on species in national collection helped by local photographers and others.	Lophocorona melanora. Leptospermum, Canberra Nature Map, volunteer schemes
00:23:13	Important role of citizen scientists. Work of amateurs before professional lepidoptery.	Cherry & Son, arid zone fauna
00:25:41	Encouragement of Julia Cooke's scribbly gum moth school project. Julia's continuation of this research at university leads to further CSIRO study	BHP Science Project, Eucalyptus delicatensis, snow gum, Macquarie University, Max Day,

		Marianne Horak, Australian Journal of Entomology
00:30:40	Methods and discoveries of Horak and Day's scribbly gum moth research. Layers and types of scribbles. Difference between southern and northern hemisphere moths	beetles, Gundaroo, DNA sequence, caterpillar, pupation, family identification
00:34:08	Process of inquiry from Julia's project. Different shapes of scribbles. Different moths associated with certain trees. Moth's use of trees. [decision to pause recording]	<i>Eucalyptus fraxinoides,</i> Blackbutt, nutrition, cambium layer
00:37:55	[return to recording] Connection with Black Mountain through volunteer guiding at Australian National Botanical Gardens.	Friends of Black Mountain, Linda Beveridge, Friends of Grasslands
00:41:49	Connection between Black Mountain sandstone and floristic diversity. Associations between moths and ants. [interruption]	
00:45:11	[return to recording] Relationship between moths and ants on Black Mountain. Issues if fire impact on moths on Black Mountain. Complexity of fire impacts. Vital role of moths in the economy of dry eucalypt forests	'Ant blues', honey dew, leaf litter, nutrient recycling, soils, micro-organisms
00: 50:04	Fire's destruction of forest nutrition. Lack of successful demonstration of ecological role of moths in leaf litter. Loss of professional taxonomists' knowledge about species associations and numbers. Decline of dedicated lepidopterists. Resources required for complex research excludes citizens scientists. Importance of keeping scientific journals open to citizen scientist contributions. Impact of loss of lepidoptery knowledge of Australia.	Leaf litter, soils, erosion, Philobota, oecophoridae, scioglyptis. DNA sequencing
00:56:26	Black Mountain as backyard version of big picture. Enjoyment of backyard research. Role of moths in Koala nutrition. Research and issues concerning management of koalas.	Brachodidae family, Miscera genus, monocots (Monocotyledon), Marianne Horak, Ian Common, ecology, Tidbinbilla, Kangaroo Island, Warrumbungles
01:01:13	Relationship between parrots, ants and moths. Role of moths in parrot survival.	Golden Shouldered Parrot, endangered species, Cape York Peninsula, Hooded Parrot, Northern Territory, Paradise parrot, extinction

01:06:10	Black Mountain as resource for observing and learning about biological science. A lot of things going on that we don't know about on Black Mountain. Ted's lifetime focus on building the national moth collection to enhance knowledge of Australian species.	<i>My Little World</i> , Julia Cooke; <i>Walden</i> , Henry Thoreau
01:08:38	Value of CSIRO entomological research and National Insect Collection in identifying species for agriculture and border control. Changes in management over time. Story highlighting comparative popular value in conserving material from moths collected on Captain Cook's Endeavour voyage in relation to conservation of the Endeavour's canon.	International research, DNA sequencing
01:12:57	Role of controversy over telecommunications tower on Black Mountain in encouraging awareness of its natural history value. CSIRO's easy access to Black Mountain for research has also highlighted its value.	
01:14:58	End of session	