The Plymouth Student Scientist - Volume 16 - 2023

The Plymouth Student Scientist - Volume 16, No.2 - 2023

2023

Diversity, abundance, and distribution of ground invertebrates in Lower Sharpham Farm

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Zavala Quiroga, V. (2023) 'Diversity, abundance, and distribution of ground invertebrates in Lower Sharpham Farm', The Plymouth Student Scientist, 16(2), pp. 314-346. https://pearl.plymouth.ac.uk/handle/10026.1/21835

The Plymouth Student Scientist University of Plymouth

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Appendices

Appendix 1 Risk Assessment Fieldwork

Asse	ssment Ref. No.						Activity Assessed			Ground insect and vegetation surveys at Sharpham Trust. It consists in setting up pitfall traps on the field with salt solution and assessing the surrounding vegetation. The traps will be collected at a later date and will be taken to the lab to identify the insects. This will require five one-day visits to the site, one first visit to assess site, one to place traps, two to survey vegetation and one final visit to collect traps.				
Asse	ssment Date	Fror Date	m 14/11 es will b	1/2022 to 14/1 be confirmed v	12/2022 appro vith supervisor	rX.	Facul	ty / Directora	ate Sc	ience and Er	ngineering			
Assessor Valeria Zavala Quiroga					:	Schoo	ol / Service	So	GEES					
Version No. 1					Addit RA	Iditional individuals involved in developing the								
Signa	ature of Assessor			Hatt				Signature of Academic Supervisor / Approver						
Risk S	Risk Score Matrix								Risk Sco	ore and Desc	ription			
	Severity			Maio	or	Eatal Sc		Risk	Category	Description				
	Very Unlikely	Gre	1 een	2 Green	3 Green	4 Gree	en	5 Amber	1-4	Low	Acceptable	No further actions needed		
ро	Unlikely	2 Gre	2 een	4 Green	6 Amber	8 Ambo	er	10 Red	5 – 9	Medium	Tolerable/Adequat	e Should be reviewed to ensure that there is nothing else which could be done		
Likeliho	Possible	: Gre	3 een	6 Amber	9 Amber	12 Red	ł	15 Red	10 - 15	High	Undesirable	Immediately review current control measures, and where appropriate decide on further actions		
	Likely	Gre	4 een	8 Amber	12 Red	16 Red	1	20 Red	16 - 25	Very High	Unacceptable	Stop activity and make immediate improvements		
	Almost Certain	Am	5 ber	10 Red	15 Red	20 Red	ł	25 Red		Likelihood (L) x Severity (S) = Risk Score (RS)				

What is/are the hazard(s) involved	Who might be harmed	What are you already doing to	Risk Scor	e with currer	nt controls	What further action is necessary?	Target Risk Score Likelihood x Severity = Risk Score		
with the activity being undertaken?	and how?	control the risk?	L	S	RS	(Add these actions to the action plan below).	L	S	RS
 Travelling to/from sampling site Injuries on the field or while commuting Collision with motor vehicles. Adverse weather conditions. Getting lost Injuries on transportation Public altercation 	 Student and accompanying person Could be severely or fatally injured. Risk of falling/tripping due to slippery ground in rainy conditions Sunburn/heatstroke Cuts, scrapes and bruises 	 Be aware of surroundings and refrain from using phones and texting while on the move. Abort activity if weather conditions are unsatisfactory. Contact details are shared with supervisor and contact to be made prior to and after trip via email/mobile. Undertake prior knowledge of site before sampling Avoid busy roads/crossing roads when possible. Look at a map before going out to the field. Plan fieldwork around the weather forecast. Wear sun cream. Have a first aid kit on hand in the field for minor injuries. Knowledge of local medical facilities. 	2 - Unlikely	4 - Major	8 - Medium Risk	Arrange best route and type of transportation	2 - Unlikely	4 - Major	8 - Medium Risk
Carrying out sampling activities within worksite area	Student and accompanying person	 Suitable PPE, footwear and clothing to be worn Visual check of terrain and avoid danger points/unstable ground. 	2 - Unlikely	3 - Moderate	6 - Medium Risk	Assess the area on arrival and choose a safe area to set up pitfall traps.	2 - Unlikely	3 - Moderate	6 - Medium Risk

 Uneven/difficult terrain Slips, trips and falls Infections or allergic reaction during sampling Sharp objects or vegetation Insect bites/stings Fallen branches or holes on the ground 	 Injuries such as cuts, bruises and broken bones. Lower leg/foot injuries Head injuries Allergic reaction 	 Be aware of surroundings and be careful when surveying Wear disposable gloves if required. Avoid drinking/eating during sampling. Exercise good hygiene. First-aid kit to be carried. Knowledge of local medical facilities. Charged mobile to be carried at all times. 							
Severe weather conditions (very hot/very cold) whilst at field site: • Hypothermia • Hyperthermia • Lightning • Down pours • Sunburn • Heatstroke	 Student and accompanying person Could lead to a serious condition or even death. Injuries. Fainting/dizziness Fatigue/weakness 	 Wear appropriate clothing for activity. Eat and drink properly – keep hydrated. Stop activity if deemed necessary and weather conditions turn severe. Plan ahead and avoid extreme weather conditions where possible. Check forecast and warnings beforehand 	1 - Very Unlikely	4 - Major	4 - Low Risk		1 - Very Unlikely	4 - Major	4 - Low Risk
If lone working at sampling site. Unwanted attention, harassment or negative attitudes from local residents	 Student Stress and the inability to continue the fieldwork 	 Contact details to be shared with supervisor and contact to be made prior to and after trip via email/mobile. Undertake prior knowledge of site before sampling. 	2 - Unlikely	3 - Moderate	6 - Medium Risk	Conduct the fieldwork with someone to avoid being alone.	1 - Very Unlikely	3 - Moderate	3 - Low Risk

either around worksite	Physical injuries	Sampling only to be carried
or whilst travelling	Ecoling unsafe	out during working hours and
to/from worksite:	• reening unsale.	
toy non worksite.	Loss of	always in daylight.
	items/money.	Minimise time at sampling
 Intimidation 		location.
 Bullying 		Ensure phone is fully charged
Theft		before any trip.
Sexual harassment.		Advisor will be aware of a
Verbal assault		friends contact details in case
Physical assault		student forgets to get in touch
		and cannot be contacted.
		• Assess the risk in the sampling
		area on day of visit
		Do not access the sampling
		location if there are
		nocation in their are
		people/situation that makes
		you reel uncomfortable.
		Benave responsibly and
		considerately. Do not wear
		provocative/offensive
		clothing
		Do not block footpaths where
		working.
		Concerning theft – be aware
		of valuables/property and its
		placement.
		If not comfortable during
		sampling, leave site.
		If deemed necessary inform
		the police
1	1	

Biting/stinging insects	Student and	•	Wear insect repellent, long	2 -	2 - Minor	4 - Low	2 - Uplikoly	2 - Minor	4 - Low
Tick bites	 Skin rashes, allergic reactions. Infections 	•	If allergic to insect bites, carry appropriate medicine and inform supervisor.	Uninkery		MBK	Unincery		MBK
	Sickness	•	Be aware of surroundings						
Wildlife:Chased/bitten by animals (e.g. dogs)	 Student and accompanying person Injury from animal bites/scratches. Infections 	•	Do not approach animals Place bags between yourself and animal – move away from site if animal does not retreat.	2 - Unlikely	2 - Minor	4 - Low Risk	2 - Unlikely	2 - Minor	4 - Low Risk
COVID-19	 Student and accompanying person Unwell from contracting COVID-19 Potential for spreading the virus 	•	Follow government guidance. Maintain good hygiene – wash hands regularly. If feeling unwell, stay at home and if necessary, take an LTR test. Avoid socialising until feel better.	2 - Unlikely	3 - Moderate	6 - Medium Risk	2 - Unlikely	3 - Moderate	6 - Medium Risk
Lab WorkFaulty equipmentBacteria from soil	Student and accompanying person • infections	•	Gloves, safety glasses and lab coat must be worn at all times Follow safety measures Only use necessary equipment Maintain good hygiene Don't touch face with gloves	2 - Unlikely	3 - Moderate	6 - Medium Risk	2 - Unlikely	3 - Moderate	6 - Medium Risk

Refer to scoring matrix on page ¾

Action Plan and Monitoring

This section should be co	mpleted by the Risk Assessor and discussed with Manager / Academic	This section should be completed by the Manager / Academic Supervisor for					
Supervisor		monitor and review					
Hazard	Action required	Action assigned to	Target date	Date Completed			
Adverse weather conditions	Plan fieldwork around the weather forecast and assess risk on the days of visit.						
Incidents on site	Assess the area on arrival and choose a safe area to survey from as well as being aware of surroundings while working.						
Incidents while travelling	Plan mode of transportation beforehand and look at route before travelling as						
to site	well as avoid busy roads/crossing roads when possible.						

Review

When reviewing this risk assessment remember to move completed actions into the 'what are you already doing.' column, as these actions should be in place by the time you review the risk assessment. You should review your risk assessment if you think it might no longer be valid (e.g. following an incident in the workplace or if there are any significant changes to hazards, such as new work equipment, work activities, personnel etc.)

Severity Table

Severity of injury	Examples	Score
Insignificant	None or very insignificant injuries, health effects, damage or disruption to work. Short-term and/or localised environmental harm.	1
Minor	Cuts bruises, mild skin irritations, mild headaches and pains requiring minor first aid treatment. Minor property damage or disruption to work. Notable contributor to environmental harm.	2

Likelihood Table

Severity of injury	Examples	Score
Very unlikely	Good control measures are in place. Controls do not rely on a person using them (i.e. personal compliance with safety rules). Controls are very unlikely to break down. People are very rarely in this area or very rarely engage in this activity.	1
Unlikely	Reasonable control measures are in place but they do rely on a person using them (some room for human error). Controls unlikely to breakdown. People are not often in this area / do not often engage in this activity.	2

Moderate	More serious injuries or ill-health requiring time off work or a hospital visit for example burns sprains, strains, short term musculoskeletal disorders, cut requiring stitches, back injuries, fractures to fingers and toes. Short term absence relating to physical or mental health issues. More serious property damage or disruption. A significant contributor to environmental harm.	3
Major	Broken limbs, amputations, long-term health problems or longer absence. Acute illness requiring medical treatment. Loss of consciousness, serious electric shock, loss of sight. Major property damage, major disruption to work. A major contributor to significant environmental harm.	4
Fatal	Injury or ill-health which leads to death either at the time, soon after the incident, or eventually, as in the case of certain occupational diseases, such as asbestos-related cancers. Catastrophic business losses. The major contributor to significant environmental harm.	5

Possible	Inadequate controls are in place, or likely to breakdown if not maintained. Controls rely on personal compliance. People are sometimes in this area or sometimes engage in this activity and situations sometimes arise from this activity.	3
Likely	Poor controls in place. Heavy reliance on personal compliance (lots of room for human error). People are often in this area / engage in this activity on a regular basis / situation often arise from this activity.	4
Almost certain	No controls in place where there should be, exposure to the hazard is expected to occur in most circumstances. The activity is considered such high risk that it will `certainly lead to injuries.	5

Appendix 2 Risk Assessment Laboratory

Assessment Ref. No. LP & HP microscopy RA Davy 2 South & 702 JA 2022-06-09					.702 Act	vity Assessed	L s	Use of stereo and compound microscopes in Davy 201, 203, 205 207 suite, 209 and 702				
Asse	essment Date	09/06/2022	2		Fac	ulty / Director	ate F	Faculty of Science and Engineering				
Assessor Jane Aker			ian	Sch	ool / Service	S	ichool of Biolo	ogical and Marine So	iences			
Vers	sion No.	03			Add RA	itional individ	uals inv	olved in dev	eloping the n/	a		
Sign	ature of Assessor	0	Mis	-		Signature of Academic Supervisor / Approver				Mis		
Risk	Score Matrix						Risk S	core and Desc	ription			
		Insignificant	Severity Minor	Moderate	Major	Fatal	Risk Score	Risk Level	Category	Description		
	Very Unlikely	1 Green	2 Green	3 Green	4 Green	5 Amber	1-4	Low	Acceptable	No further actions needed		
ро	Unlikely	2 Green	4 Green	6 Amber	8 Amber	10 Red	5 – 9	Medium	Tolerable/Adequate	Should be reviewed to ensure that there is nothing else which could be done		
Likeliho	Possible	3 Green	6 Amber	9 Amber	12 Red	15 Red	10 - 1	L5 High	Undesirable	Immediately review current control measures, and where appropriate decide on further actions		
	Likely	4 Green	8 Amber	12 Red	16 Red	20 Red	16 - 2	25 Very High	Unacceptable	Stop activity and make immediate improvements		
	Almost Certain	5 Amber	10 Red	15 Red	20 Red	25 Red			Likelihood (L) x Sever	x Severity (S) = Risk Score (RS)		

What is/are the hazard(s) involved	Who might be	What are you already doing to	Risk Scor in place	e with currer	nt controls	What further action is necessary?	Target Risk Score Likelihood x Severity = Risk Score		
with the activity being undertaken?	harmed and how?	control the risk?	L	S	RS	plan below).	L	S	RS
Transmission of	Staff, students and	Lab users instructed not to come	2 -	4 - Major	8 -	Review all local and activity	2 -	4 - Major	8 -
COVID-19 between	others	to campus if experiencing	Unlikely		Medium	based risk assessments.	Unlikely		Medium
building users		symptoms of COVID-19. Staff &			Risk	Ensure all preventative			Risk

				-					
		students to frequently sanitise				measures are followed and report			
		hands via wash basins or hand				any breaches			
		sanitiser. Lab users to book							
		laboratory space prior to entering							
		the building to prevent							
		overcrowding.							
		Staff & students to clean benches							
		and any equipment with an							
		appropriate disinfectant before							
		they start work and							
		again after they have finished.							
		Ventilation to be maintained in all							
		communal areas either via open							
		windows (provided this does not							
		breach any containment rules) or							
		mechanical means. Staff &							
		students who are not							
		comfortable or confused with							
		operations/instructions to speak							
		to their school technical manager.							
		Staff & students to retain							
		awareness of the risk at all times.							
Using microscope for	Microscope user may	Height and backrest adjustable	2 -	3 -	6 -	Review all local and activity	2 -	3 -	6 -
extended periods of	develop eye or back	chairs provided in Davy 205 for	Unlikely	Moderate	Medium	based risk assessments.	Unlikely	Moderate	Medium
time with poor	strain or other	extended periods of microscope			Risk	Ensure all preventative			Risk
posture	repetitive strain injury	use. All staff and students				measures are followed and report			
		undertake health and safety				any breaches			
		online training, including safe use							
		of DSE, which can be applied to							
		microscope use. Users instructed							
		during compulsory lab inductions							
		to set microscope and chair at							
		correct height and position prior							
		to use and to take regular breaks.							

		Adequate lighting provided in all							
		laboratories and maintained by							
		Estates.							
Faulty electrical	Electrocution of	Annual PAT testing of electrical	2 -	4 - Major	8 -	Review all local and activity	2 -	4 - Major	8 -
equipment and	microscope user	items and regular checks by	Unlikely		Medium	based risk assessments.	Unlikely		Medium
spillage of liquids	and/or electrical fire	technical staff for loose wiring and			Risk	Ensure all preventative			Risk
when using	affecting all building	other faults. Electrical supply				measures are followed and report			
microscope light	users	fitted with trip switches. Users				any breaches			
sources		instructed to handle liquids with							
		care to avoid spillages, paper							
		towels provided in all labs and							
		chemical spill kit available in Davy							
		204a. Fire safety and evacuation							
		procedures in place and outlined							
		during compulsory lab inductions.							
Breakages to	Minor cuts to	Induction procedure outlines safe	3 -	2 - Minor	6 -	Review all local and activity	3 -	2 - Minor	6-
glassware such as	microscope user	handling of glassware and	Possible		Medium	based risk assessments.	Possible		Medium
watch glasses,	and/or other lab users	immediate reporting of breakages			Risk	Ensure all preventative			Risk
specimen tubes,		to technical staff for prompt				measures are followed and report			
slides, cover slips etc.		disposal. Provision of dustpan and				any breaches			
		brush in all laboratories and glass							
		bins provided in Davy 204 and							
		702. Emergency contact details							
		displayed in all labs. Injuries							
		reported to first aid trained staff.							
		Provision of first aid kits in Davy							
		202 and LABplus.							
Unsafe use of sharp	Minor cuts or	Induction procedure outlines safe	3 -	3 -	9 -	Review all local and activity	3 -	3 -	9 -
manipulation tools	moderate scalpel	use and storage of sharp tools and	Possible	Moderate	Medium	based risk assessments.	Possible	Moderate	Medium
such as forceps,	injury of microscope	reporting of injuries to first aid			Risk	Ensure all preventative			Risk
scalpels, mounted	user and/or other lab	trained staff. Covers provided for				measures are followed and report			
needles etc.	users	scalpel blades and sharps bins in				any breaches			
		Davy 203, 205 and LABplus.							
		Emergency contact details							

		displayed in all labs. Provision of							
		TIRST aid Kits in Davy 202and							
	luiumu on ill boolth of	COSULI former completed and	2	2 Minor	4 1		2	2 Minor	4 1
Exposure to	injury or ill nealth of	COSHH forms completed and	Z -	2 - Winor	4 - LOW	Review all local and activity	Z -	2 - Minor	4 - LOW
preservation and/or	microscope user	information folder prior to using	Uninkely		RISK		Uniikely		RISK
mounting chemicals	and/or other lab users	information folder prior to using				Ensure an preventative			
		chemicals. COSHH forms for				measures are followed and report			
		etnanol, IDA and <u>10% formalin</u>				any breaches			
		staff by clicking embedded							
		hyperlinks. Appropriate measures							
		for handling and storage							
		conducted according to COSHH							
		regulations, including use of							
		appropriate PPE and adherence to							
		safety signage. Accidental release							
		and exposure reported to first aid							
		trained staff. Emergency contact							
		details displayed in all labs.							
		Provision of appropriate PPE,							
		eyewash stations, hand washing							
		facilities, and adequate ventilation							
		in all labs. Chemical spill kit							
		housed in Davy 204a.							
Slips, trips and falls	Injury of microscope	Walkways and other transit areas	2 -	3 -	6 -	Review all local and activity	2 -	3 -	6 -
	user and/or other lab	kept as free of clutter as possible.	Unlikely	Moderate	Medium	based risk assessments.	Unlikely	Moderate	Medium
	users	Bag storage area provided in Davy			Risk	Ensure all preventative			Risk
		205. Compulsory lab inductions				measures are followed and report			
		instruct users to handle liquids				any breaches			
		with care to avoid spillages, to							
		transport liquids in small							
		quantities in sealed containers							
		and to report spillages and							
		obstructions to technical staff							

		immediately. Chemical spill kit housed in Davy 204a and paper towels provided in all labs. Regular checks by technical staff to remove unnecessary clutter.							
Other injury, ill health, fire or other cause for evacuation	Injury or ill health of microscope user and/or other lab users, smoke inhalation and or burns to lab users	Technical staff monitor lab users during working hours and ensure labs are locked at the end of the working day. Fire safety and evacuation procedures in place and outlined during compulsory lab inductions. Face coverings to be worn if possible during fire evacuation. Emergency contact details displayed in all labs, including details of multiple first aid trained staff. Defibrillator available in south end foyer of Davy Building. Access restricted to Davy Building and all laboratories outside of normal working hours.	2 - Unlikely	4 - Major	8 - Medium Risk	Review all local and activity based risk assessments. Ensure all preventative measures are followed and report any breaches	2 - Unlikely	4 - Major	8 - Medium Risk
Lone working by staff and/or postgraduates	Injury or ill health of lone workers	Lone working avoided where possible. Lone workers must undertake fire marshal training, risk assess their activities in relation to lone working, carry mobile phones and inform a household member of their whereabouts. Access to building outside of working hours restricted and granted on a case- by-case basis, once approved by DOS or other appropriate individual.	2 - Unlikely	4 - Major	8 - Medium Risk	Review all local and activity based risk assessments. Ensure all preventative measures are followed and report any breaches	2 - Unlikely	4 - Major	8 - Medium Risk

Inappropriate	Lab users may	Adequate lighting and appropriate	2 -	2 - Minor	4 - Low	Review all local and activity	2 -	2 - Minor	4 - Low
workplace conditions	experience ill health	heating/cooling maintained.	Unlikely		Risk	based risk assessments.	Unlikely		Risk
		Window openers, window blinds				Ensure all preventative			
		and heating/cooling controls				measures are followed and report			
		provided. Toilet facilities and				any breaches			
		access to drinking water in Davy							
		204 and SoGEES technical office							
		provided.							

Refer to scoring matrix on page 34

Appendix 3 Coordinates Table

TRAP	LAT	LONG	ALT (FT A.S.L)
9.1	50º 24'35.43516"	W 3º39'56.38788"	265
9.2	50º 24'35.18532"	W 3º39'57.40416"	221
9.3	50º 24'35.11476"	W 3º39'57.83724"	218
9.4	50º 24'34.96104"	W 3º39'57.93948"	218
9.5	50º 24'35.27424"	W 3º39'58.15512"	231
9.6	50º 24'35.46036"	W 3º39'57.9852"	220
9.7	50º 24'36.65988"	W 3º39'57.80124"	181
9.8	50º 24'37.47888"	W 3º39'58.49424"	186
9.9	50º 24'37.41408"	W 3º39'58.64508"	186
9.10	50º 24'37.4274"	W 3º39'58.68756"	183
9.11	50º 24'37.45908"	W 3º39'58.86792"	182
9.12	50º 24'37.51092"	W 3º39'58.82292"	178
9.13	50º 24'40.3146"	W 3º40'1.06176"	127
9.14	50º 24'40.26672"	W 3º40'1.37568"	103
9.15	50º 24'40.25772"	W 3º40'1.52328"	102
9.16	50º 24'40.3326"	W 3º40'2.45172"	108
9.17	50º 24'40.46256"	W 3º40'2.44776"	89
9.18	50º 24'40.49784"	W 3º40'2.34876"	91
18.1	50º 24'39"	W 3º39'50"	98
18.2	50º 24'38.82348"	W 3º39'50.26032"	103
18.3	50º 24'38.61864"	W 3º39'49.89456"	70
18.4	50º 24'38.84508"	W 3º39'49.6188"	93
18.5	50º 24'39.16332"	W 3º39'49.72824"	99
18.6	50º 24'39.39444"	W 3º39'49.97016"	88
18.7	50º 24'41.81796"	W 3º39'51.99264"	52
18.8	50º 24'41.55084"	W 3º39'51.67764"	75
18.9	50º 24'41.58396"	W 3º39'51.66072"	94
18.10	50º 24'41.37876"	W 3º39'51.13836"	99
18.11	50º 24'41.98644"	W 3º39'51.29856"	68
18.12	50º 24'41.98824"	W 3º39'51.2964"	77
18.13	50º 24'44.6058"	W 3º39'58.24512"	48
18.14	50º 24'44.59536"	W 3º39'58.15512"	53
18.15	50º 24'44.41032"	W 3º39'58.8322"	60
18.16	50º 24'44.226"	W 3º39'57.29652"	55
18.17	50º 24'44.73144"	W 3º39'57.58128"	24
18.18	50º 24'44.70372"	W 3º39'57.70476"	40

Table 8: Pitfall traps coordinates of farmed (9) and rewilded field (18).

Appendix 4 Invertebrate identification worksheet

Table 9: Raw data example of invertebrate identification found in each trap.

		Trap Sar	nples (examp	le of the first	t 6 traps)	
Species	18.1.1	18.1.2	18.1.3	18.1.4	18.1.5	18.1.6
Order Coleoptera Beetles						
Sp. A Family Staphylinidae rove beetle ocypus olens	2	4				
Sp. B looks like A but much smaller	1	2	2			1
Sp. C head bigger than torax	1		1		1	1
Sp. D beetle larvae	1		2	3	3	1
Sp. E similar to A but bigger torax		1				
Sp. F honey color elytra carabidae		2	6	2		
Sp. G B but curved body		2		3	1	
Sp. H tiny beetle		3	1	1	2	
Sp. I brownish big torax big body			2	1	2	
Sp. J similar to C but yellowish					1	
Sp K larvae					1	1
Onde a la se a de Mara dillar						
Order Isopoda woodilde				-	1	
Sp. A shirty	2	2	1	2	1	
sp. b scriped red/gray		2	1	2	1	
Order Pseudoscomiones False scomions						
Sp. A	1					
Order Polydesmida Millipede						
Sp. A flat backed	1	2		1		
Order Opiliones Harvest Spider						
Sp. A bigger brown	1					
Sp. B black with two gold dots	3	1		1	2	2
Order Araneae Spiders						
Sp. A white bum	1					
Sp B big eyes brownish				1		
Sp C brown/black				1		
Sp D Black				2		
Sp E white/translucent with two black dots					1	1
Sp F big yellow/brownish torso and legs						1
Class Asari Mitas						
Order Mesertigmete						
	4	1		1	1	
Sp. B double outer circle		1		-	-	
Order Oribatida						
Sp A black	1		1			
Class Collembola Springtails						
Order Entomobryomorpha						
Sp. A yellowish	1	2	1	2	1	
Sp. B hairy	1					
Sp D like A but black gray spots				1		
Sp E white/transparent	15	14	9	8	12	10
Order Symphypleona						
Sp C tiny big head long antena	3			1		
Order Badanama anha						
Sp. Floog body short anten as						
Sp. G Japone			1			
			1			
Order Hemiptera Bugs						
Sp. A	1					
Sp B vellow	_					
Order Stylommatophora Slugs and snails						
Sp. A slug		1	2	3		1
Sp. B spotted slug				1		
Sp. A flat snail		1				
Sp. B spiral snail						
Order Diptera True flies						
Sp. A		2		1		
Sp. B fly larvae	1			1		
Sp. C tiny stripped pointy bum				1		
Order Amphipoda Sandhoppers and scuds						
Sp A orange				3		

Appendix 5 Biodiversity Index

Species	Rewilded	pi	In	pi*ln	sum	Н
Coleoptera	134	0.23971377	-1.42830967	-0.3423855	-1.81566451	1.82
Isopoda	72	0.12880143	-2.04948335	-0.26397639		
Pseudoscorpiones	1	0.00178891	-6.32614947	-0.0113169		
Polydesmida	4	0.00715564	-4.93985511	-0.0353478		
Opiliones	20	0.03577818	-3.3304172	-0.11915625		
Araneae	18	0.03220036	-3.43577772	-0.11063327		
Mesostigmata	18	0.03220036	-3.43577772	-0.11063327		
Oribatida	2	0.00357782	-5.63300229	-0.02015385		
Entomobryomorpha	228	0.4078712	-0.89680384	-0.36578046		
Symphypleona	9	0.01610018	-4.1289249	-0.06647643		
Poduromorpha	4	0.00715564	-4.93985511	-0.0353478		
Hemiptera	2	0.00357782	-5.63300229	-0.02015385		
Stylommatophora	25	0.04472272	-3.10727365	-0.13896573		
Diptera	12	0.02146691	-3.84124282	-0.0824596		
Amphipoda	3	0.00536673	-5.22753718	-0.02805476		
Opisthopora	5	0.00894454	-4.71671156	-0.04218883		
Lithobiomorpha	1	0.00178891	-6.32614947	-0.0113169		
Hymenoptera	1	0.00178891	-6.32614947	-0.0113169		
Total	559					

Table 10: Shannon Wiener Biodiversity Index calculation for overall rewilded field.

Table 11: Shannon Wiener Biodiversity Index calculation for overall farmed field.

Species	Farmed	pi	In	pi*ln	sum	Н
Coleoptera	132	0.4444444	-0.81093022	-0.36041343	-1.86636779	1.87
Isopoda	6	0.02020202	-3.90197267	-0.07882773		
Pseudoscorpiones	1	0.003367	-5.69373214	-0.01917082		
Polydesmida	0	0				
Opiliones	2	0.00673401	-5.00058496	-0.03367397		
Araneae	21	0.07070707	-2.6492097	-0.18731786		
Mesostigmata	9	0.03030303	-3.49650756	-0.10595477		
Oribatida	5	0.01683502	-4.08429423	-0.06875916		
Entomobryomorpha	63	0.21212121	-1.55059741	-0.3289146		
Symphypleona	11	0.03703704	-3.29583687	-0.12206803		
Poduromorpha	1	0.003367	-5.69373214	-0.01917082		
Hemiptera	1	0.003367	-5.69373214	-0.01917082		
Stylommatophora	14	0.04713805	-3.05467481	-0.14399141		
Diptera	10	0.03367003	-3.39114705	-0.11418004		
Amphipoda	2	0.00673401	-5.00058496	-0.03367397		
Opisthopora	9	0.03030303	-3.49650756	-0.10595477		
Lithobiomorpha	1	0.003367	-5.69373214	-0.01917082		
Hymenoptera	9	0.03030303	-3.49650756	-0.10595477		
Total	297					