How to analyse your Mm2 data.

First you need to login to your Mm2 account once you have done this, you should see the below page.



Select the surveys you would like to analyse. For this example I will be selecting 'Soft Shore Mm2'.

← → C 🔒 survey.mm2.net.nz/surveys	07 🖄	☆ 🗋	* 🗊	:
🛗 Apps 🔯 Blackboard 🔇 Evision 👹 Library, University o 🤹 Outlook 🔶 Google Scholar 👃 Timesheet entry 🔇 Sign out 🔇 New Tab			🗄 Readin	g list
Marine Metre Squared				•
Mm2.net.nz Home My Surveys Resources Blog Species Map Surve		Data plot		
Wei	come TAI Sci	ence GATE	Sign-out	
				1
My Surveys				
Choose your survey type from the collection below. Please choose carefully as some of the surveys appear similar.				
Rocky Shore Mm2 (0) Rocky Shore Transect (0) Soft Shore Mm2 (32) Soft Shore Transect (0)				
Rocky Shore Mm2				
+ Add new Mm2 survey Visualise selected surveys Export All Rocky Shore Mm2 data				
Marine Metre Squared is an easy way to survey the intertidal community. Monitor a 1m x 1m square patch of you local rocky shore on every season by recording the animals and plants that live there and the numbers found in the measured area.	De			

Once you have chosen which surveys you want to analyse, click the "Export all Mm2 data" button. This will say "Export all Rocky Shore Mm2 data" if you are analysing rocky shore data and "Export all Soft Shore Mm2 data".

\leftrightarrow \rightarrow C \triangleq surve	y.mm2.net.nz/surveys					0- 7 (3 🖈 🗋 🗯	1
👖 Apps 📧 Blackboard	🔇 Evision 💘 Library, University o 🚳 Outloo	ok 🔶 Google Scholar 👍 Timeshee	t entry 🔇 Sign	out 🕄 New	Tab			Reading list
	Mm ²	Marine M	etre	Sq	uare	ed		Å
	Mm2.net.nz	me My Surveys Reso					Data plots	
						Welcome TAI	Science GATE	Sign-out
	My Surveys							
	Choose your survey type from the collection	below. Please choose carefully as	some of the sur	veys appear si	milar.			
	Rocky Shore Mm2 (0) Rocky Shore Tran	Soft Shore Mm2 (32)	Soft Shore Tr	ansect (0)				
	Soft Shore Mm2		_					
	+ Add new SoftShore survey Visualise selected	d surveys Export Ali Soft Shore Mm2 of	lata					
	Surveyor names	Location O	Date 😡	Shore level O	Species O			
								*

Once you have chosen this, your data will be saved in your downloads folder.

🦊 🛃 📜 🖛 Downl	oads	:		-	- 🗆	\times
File Home Sha	are	View			^	?
Pin to Quick Copy Paster access) N	Move to • X Delete • Copy to • Rename New folder	Properties		Select all Select none Invert selectio	n
Cipboard	TI ·				J	
$\leftarrow \rightarrow \land \uparrow \checkmark \checkmark$	Thi	s > Downloa > • O	Search D	ownlo	ads	
🖊 Downloads 🖈	^	Name		Date	modified	^
Network Pictures 🖈		× Today (1)				
📙 HGMP work 🖈		Soft Share Mm2 Surface Species Da	to (1)	1/10	/2021 11.11 AM	
📙 Species Data		Soft Shore Minz Surface Species Da		1/12/	2021 11:11 AIVI	
📒 Spreadsheets		 Earlier this week (4) 				
📙 Thesis and chapt		1. j.jglr.2009.08.012		29/1	1/2021 4:32 PM	
thesis stuff		[™] 1-s2.0-0031938496000157-main		29/1	1/2021 3:41 PM	
-		 10fem 1 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -		29/1	1/2021 12:17 PM	
letter - Person		▲ 1-s2.0-S0045653510001657-main		29/1	1/2021 11:30 AM	
🗢 This PC		✓ Last week (10)				
3D Objects		党 1-s2.0-S0269749118334250-main		26/1	1/2021 2:54 PM	
		ື 1-s2.0-S0166445X12000033-main		26/1	1/2021 2:17 PM	
		1-s2.0-S0048969720375173-main		26/1	1/2021 12:44 PM	~
175 items	~				:==	
175 Items						

Open this file and your data will look like this!

File Home Insert Draw AB7 - : X fs 1 Survey O Surveyre Latitude Latitude fs 2 233 TA Sceec 3.8437 17.4669 2360/2018 3 233 TA Sceec 3.8437 17.4669 2360/2018 3 233 TA Sceec 3.8437 17.4669 2360/2018 3 233 TA Sceec 3.8437 17.4669 2360/2018 00 3 233 TA Sceec 3.8445 17.4669 2360/2018 00 11 243 TA Sceec 3.8448 17.4669 2360/2018 00 12 244 TA Sceec 3.8448 17.4669 2360/2018 00 13 247 TA Sceec 3.8448	∰ H Y ~ ~ & - ₹	Soft Shore Mm2 Surf	ace Species Data[a	2012] - Read-Only - Ex	₽ Search					leresa M	orrell 👖	6			
AB7 F F F 1 Surveyor L structure 5. 0. 0. 0. 2 323 T4 Socies 4.6.417 17.4.662 2.050/2018 0.0 3 233 T4 Socies 4.6.417 17.4.662 2.050/2018 0.0 3 233 T4 Socies 4.6.417 17.4.662 2.050/2018 0.0 3 233 T4 Socies 4.6.417 17.4.662 2.050/2018 0.0 4 233 T4 Socies 4.6.447 17.4.662 2.050/2018 0.0 7 233 T4 Socies 4.6.447 17.4.662 2.050/2018 0.0 9 233 T4 Socies 4.6.447 17.4.662 2.050/2018 0.0 11 234 T4 Socies 4.6.441 17.4.662 2.050/2018 0.0 12 234 TA Socies 4.6.441 17.4.662 2.050/2018 0.0 12 234 TA Socies 4.6.4418 17.4.662 2.050/2018 0.0 12 234 TA Socies 4.6.4418 17.4.662 2.050/2018 0.0 12 234 TA Socies 4.6.4418 17.4.662 2.050/2018	e Insert Draw Page L	ayout Formulas	Data Revi	iew View Help								ය Sh	are	Comr	nents
A S C D 1 Surveyo Latitude Latitude Latitude Latitude 1 Surveyo Latitude Latitude Latitude Latitude 2 233 71 Alcenes -68437 71.4698 2507(218) 3 233 71 Alcenes -68437 71.4698 2507(218) 203 3 233 71 Alcenes -68437 71.4699 2507(218) 203 3 233 71 Alcenes -68437 71.4699 2507(218) 203 3 233 71 Alcenes -68437 71.4699 2507(218) 203 3 233 71 Alcenes -68447 71.4699 2507(218) 203 3 233 71 Alcenes -68448 71.4699 2507(218) 201 3 234 71 Alcenes -68448 71.4699 2507(218) 201 3 234 71 Alcenes -68448 71.4699 2507(218) 201 201 201 201 201 201 201 201 201 <															
d A B C D E 2 1231 14 Icsec 454421 17 4469 25/05/2018 100 The sec 25/05/2018 100 2 1231 14 Icsec 454421 17 4469 25/05/2018 100 The sec 25/05/2018 100 4 1231 14 Icsec 454421 17 4469 25/05/2018 100 The sec 25/05/2018 100 4 1231 14 Icsec 454421 17 4469 25/05/2018 100 The sec 25/05/2018 100 7 1231 14 Icsec 454421 17 4469 12/05/2018 100 The sec 25/05/2018 100 7 1231 14 Icsec 454421 17 4469 12/05/2018 100 The sec 25/05/2018 100 7 1231 14 Icsec 454411 17 4469 12/05/2018 100 The sec 25/05/2018 100 1231 14 Icsec 454411 17 4469 12/05/2018 100 The sec 25/05/2018 100 The sec 25/05/2018 100 1231 14 Icsec 45441 17 4666 12/06/2018 100 The sec 25/05/2018 100 The sec 25/05/2018 100 The sec 25/05/2018 100 1231 14 Icsec 45441 11 1466 12/06/2018 100 The sec 25/05/2018 100 The sec															
1 Durrey D Lattude Long Tade Data 2 233 A Loce -66437 7.4699 2507/021 200 3 233 A Loce -66437 7.4699 2507/021 200 233 A Loce -66447 7.4699 2507/021 200 9 233 A Loce -66447 7.4699 2507/021 200 10 244 A Loce -66441 7.469 2507/021 200 11 244 A Loce -66441 7.469 2507/021 200 12 244 A Loce -66441 7.469 2507/021 200 200 207 207 207 207 207 200 207		H I I	I K I I	MNOP	O R S	т	. u	V W	x	v	7	AA	R AC	4D	ΔE
2 21 21 21 21 24 24 24 25 74 </td <td>Latitude Longitude Date Time Shore</td> <td>Level ocation N Location De Group</td> <td>n Size Groun Lea Survey Ar</td> <td>Project Na Species Na Species Na Taxo Fa</td> <td>mi Taxo Class Taxo Phyli Taxo King</td> <td>Surface o</td> <td>r Cover or C</td> <td>Abundanc Core1</td> <td>Core2</td> <td>Core3</td> <td>Core4</td> <td></td> <td>-</td> <td>HU</td> <td>-</td>	Latitude Longitude Date Time Shore	Level ocation N Location De Group	n Size Groun Lea Survey Ar	Project Na Species Na Species Na Taxo Fa	mi Taxo Class Taxo Phyli Taxo King	Surface o	r Cover or C	Abundanc Core1	Core2	Core3	Core4		-	HU	-
1 21 21 24 25 74 26 25 74 26 25 74 26 25 74 26 25 74 26 25 74 26 25 74 26 25 74 26 26 21 74 26 26 74 26 74 74 97 250 74 26 74 74 99 26 74 74 99 26 74 74 99 26 74 16 86 74 74 99 74 75<	-36 8437 174 669 25/05/2018 2000/01/01/ow	Oranzihin Shallow (A.c.	A Dion Michlow	Seaweek Snail Mur Cominella Burrini	a Gastroon Mollusca Animalia	Surface	Count	2	Corez	Corea	cores				-
4 231 M Stere, 36487 714.469 256/0721 Bornel 5 231 T4 Stere, 36487 714.691 256/0721 Bornel 6 231 T4 Stere, 36487 714.691 256/0721 Bornel 6 231 T4 Stere, 36487 714.691 256/0721 Bornel 7 231 T4 Stere, 36488 714.691 256/0721 Bornel 7 236 T4 Stere, 36488 714.691 256/0721 Bornel 7 236 T4 Stere, 36488 714.691 256/0721 Bornel 7 237 T4 Stere, 36488 714.691 716/0721 Bornel 7 237 T4 Stere, 36488 714.691 716/0721 Bornel 7 237 T4 Ste	-36.8437 174.669 25/05/2018 2000-01-01 mw	Orangihin Shallow (A c	4 Dion, Mici Low	Seaweek Seaweed - Ulva sn Ulvacea	e Ulyophyce Chiorophy Plantae	Surface	Cover	1							
3 21 71.4 (stere: 3-6.847) 7.44.691 2500/2018 3 21.3 T4 (stere: 3-6.847) 7.44.691 2500/2018 200 3 31.3 T4 (stere: 3-6.847) 7.44.691 2500/2018 200 3 31.3 T4 (stere: 3-6.847) 7.44.691 2500/2018 200 3 31.4 (stere: 3-6.848) 7.44.691 2500/2018 200 3 21.4 (stere: 3-6.848) 7.44.691 2500/2018 200 200 200 200 200 200 200 200 200 200 200 200/2018 <td>-36.8437 174.669 25/05/2018 2000-01-0 Low</td> <td>Orangihini Shallow (A c</td> <td>4 Dion, Micl Low</td> <td>Seaweek Seaweed - Gracilaria Gracilar</td> <td>ia Florideoph Rhodophy Plantae</td> <td>Surface</td> <td>Cover</td> <td>4</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	-36.8437 174.669 25/05/2018 2000-01-0 Low	Orangihini Shallow (A c	4 Dion, Micl Low	Seaweek Seaweed - Gracilaria Gracilar	ia Florideoph Rhodophy Plantae	Surface	Cover	4							
20 71 A Science. 36:8472 74:469 25/07/2018 20 74:560 36:8477 74:669 25/07/2018 20 20 74:560 36:8477 74:669 25/07/2018 20 20 74:560 36:8477 74:669 25/07/2018 20 20 74:560 36:8477 74:669 25/07/2018 20 20 74:560 36:8487 74:669 25/07/2018 20 20 74:560 36:8418 74:660 25/07/2018 20 20 74:560 36:8418 74:660 25/07/2018 20 20 74:560 36:8418 74:660 25/07/2018 20 20 74:560 36:843 74:660 25/07/2018 20 20 74:560 36:843 74:660 25/07/2018 20 20 74:560 36:843 74:670 25/07/2018 20 20 74:560 36:843 74:670 25/07/2018 20 <td>-36.8437 174.669 25/05/2018 2000-01-0 Low</td> <td>Orangihin Shallow (A c</td> <td>4 Dion, Micl Low</td> <td>Seaweek Crab, Tuni Austrobeli Varunid</td> <td>ae Malacostr Arthropod Animalia</td> <td>Infauna</td> <td>Count</td> <td>1</td> <td>1</td> <td>0</td> <td></td> <td></td> <td></td> <td></td> <td></td>	-36.8437 174.669 25/05/2018 2000-01-0 Low	Orangihin Shallow (A c	4 Dion, Micl Low	Seaweek Crab, Tuni Austrobeli Varunid	ae Malacostr Arthropod Animalia	Infauna	Count	1	1	0					
2 21 21 44.693 2/05/0210 23 21 45.6847 2.4649 2/05/0210 23 21 45.6847 2.4649 2/05/0210 20 23 21 45.6847 2.4649 2/05/0210 20 23 21 45.6847 1.4649 2/05/0210 20 23 21 45.6847 1.4649 2/05/0210 20 23 21 45.6848 1.4646 2/05/0210 20 23 24 45.6848 1.4646 2/05/0210 20 23 24 45.6848 1.4646 2/05/0210 20 24 24 45.6848 1.4646 2/05/0210 20 25 7.45.686 -56.4811 1.4646 2/05/0210 20 21 7.45.686 -56.4831 1.4647 2/05/0210 20 27/05/0210 20 27/05/0210 20 27/05/0210 20 27/05/0210 20 27/05/0210	-36.8437 174.669 25/05/2018 2000-01-0 Low	Orangihin Shallow (A c	4 Dion, Micl Low	Seaweek Cockle/Cla Austroven Venerid	ae Biyalvia Mollusca Animalia	Infauna	Count	25	7	6					
8 23 73 Alsene -36.847 74.469 2500/0318 0 9 23 74.568 -36.848 74.668 5500/0318 0 0 23.94 74.568 -36.848 74.668 5500/0318 0 0 23.94 74.568 -36.848 74.668 5500/0318 0 0 23.94 74.568 -36.848 74.668 5500/0318 0 34.94 74.668 56.848 74.668 5500/0318 0 35.94 74.568 -36.848 74.668 5500/0318 0 75.000/0318 0 36.948 74.668 54.648 74.668 5500/0218 0 75.000/0318 0 75.000/0318 0 37.948 75.000/0318 0 75.000/0318 0 17.468 56.848 74.669 75.000/0318 0 17.468 55.000/0318 0 17.468 75.000/0318 0 17.469 75.000/0318 0 17.469 75.000/0318 0 17.469 75.000/0318 0 17.469	-36.8437 174.669 25/05/2018 2000-01-0 Low	Orangihin Shallow (A c	4 Dion, Micl Low	Seaweek Worm, Ra Family Nei Nereidi	ia-Polychaet, Annelida Animalia	Infauna	Count	1	0	0					
20 71 A Science: 3-6.847 71.4699 2/50/2012	-36.8437 174.669 25/05/2018 2000-01-0 Low	Orangihini Shallow (A c	4 Dion, Micl Low	Seaweek Anemone, Anthopley Actiniid	ae Anthozoa Cnidaria Animalia	Infauna	Count	2	0	2			-		
0 21.74 Iscience - 36.84.0 74.666 - 25/05/2012 00 21.84 TA Iscience - 36.84.0 74.666 - 25/05/2012 00 74.666 - 75/05/2012 00 21.84 TA Iscience - 36.84.0 74.666 - 75/05/2012 00 75/05/2012 00 21.84 TA Iscience - 36.84.0 74.666 - 75/05/2012 00 75/05/2012 00 21.84 TA Iscience - 36.84.0 74.666 - 75/05/2012 00 75/05/2012 00 21.84 TA Iscience - 36.84.0 74.666 - 75/05/2012 00 75/05/2012 00 21.84 TA Iscience - 36.84.0 74.666 - 75/05/2012 00 75/05/2012 00 21.84 TA Iscience - 36.84.0 74.666 - 75/05/2012 00 75/05/2012 00 21.82 TA Iscience - 36.84.0 74.666 - 75/05/2012 00 75/05/2012 00 21.27 TA Iscience - 36.84.0 74.667 - 75/05/2012 00 75/05/2012 00 21.27 TA Iscience - 36.84.0 74.667 - 75/05/2012 00 75/05/2012 00 21.27 TA Iscience - 36.84.0 74.667 - 75/05/2012 00 75/05/2012 00 21.27 TA Iscience - 36.84.0 74.667 - 75/05/2012 00 75/05/2012 00 21.27 TA Iscience - 36.84.0 74.667 - 75/05/2012 00 75/05/2012 00 75/05/2012 00 75/05/2012 00 75/05/2012 00 75/05/2012 00 75/05/2012 00 75/	-36.8437 174.669 25/05/2018 2000-01-0 Low	Orangihini Shallow (A c	4 Dion, Micl Low	Seaweek Clam, Nut Linucula h Nuculid	ae Bivalvia Mollusca Animalia	Infauna	Count	88	19	28					
11 21.74 A Lotters 46.84.81 74.466.25/05/0218 22.84 F4 Sicters 36.84.81 74.466.25/05/0218 20.05/0218 23.84 F3 Sicters 36.84.81 74.466.25/05/0218 20.05/0218 23.84 F3 Sicters 36.84.81 74.466.25/05/0218 20.05/0218 23.84 F3 Sicters 36.84.81 74.466.25/05/0218 20.05 23.84 F3 Sicters 36.84.81 74.466.25/07/0218 20.05 23.84 F3 Sicters 36.84.81 74.466.25/07/0218 20.05 23.84 F3 Sicters 36.84.81 74.466.25/07/0218 20.05 23.84 F3 Sicters 36.84.81 74.467.25/07/0218 20.05 23.74 F3 Sicters 36.84.81 74.467.25/07/0218 20.05/07/0218 23.27 F4 Sicters 36.84.81 74.467.25/07/0218 20.05/07/0218 23.77 F4 Sicters 36.84.81 74.467.25/07/0218 20.05/07/0218 23.77 F4 Sicters 36.84.81 74.467.25/07/0218 20.05/07/018	-36.8416 174.666 25/05/2018 2000-01-0 Mid	Te Atatu Fvery muddy	4 Shivani, Ali Medium	Seaweek Cockle/Cla Austroven Venerid	ae Bivalvia Mollusca Animalia	Surface	Count	1							
2 24 74 55 -34.464 256.05 2 24 74 556.05 -34.464 256.05 2 24 74 556.05 -34.464 256.05 2 24 74 556.05 -34.464 256.05 2 24 74 556.05 -34.464 256.05 2 24 74 556.05 -34.464 256.05 3 34 156.06 -34.464 174.665 556.05 3 24 74 556.05 -34.464 174.665 556.05 3 27 74 556.05 -34.843 174.69 556.07 256.07 <td>-36.8416 174.666 25/05/2018 2000-01-0 Mid</td> <td>Te Atatu Every muddy</td> <td>4 Shivani, Ali Medium</td> <td>Seaweek Snail, Sma Stiracolpu Turritel</td> <td>idi Gastropoc Mollusca Animalia</td> <td>Surface</td> <td>Count</td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	-36.8416 174.666 25/05/2018 2000-01-0 Mid	Te Atatu Every muddy	4 Shivani, Ali Medium	Seaweek Snail, Sma Stiracolpu Turritel	idi Gastropoc Mollusca Animalia	Surface	Count	1							
3 3 74 Molectic - 48-846 74.466 25/05/2018 3 3 74 Molectic - 38-846 74.466 25/05/2018 20 3 3 74 Molectic - 38-846 74.466 25/05/2018 20 3 3 74 Molectic - 38-846 74.466 25/05/2018 20 3 3 74 Molectic - 38-848 74.466 25/05/2018 20 3 2 74 Molectic - 38-848 74.466 25/05/2018 20 3 2 74 Molectic - 38-848 74.467 25/05/2018 20 2 2 74 Molectic - 38-848 74.467 25/05/2018 20 2 2 74 Molectic - 38-848 74.467 25/05/2018 20 2 2 74 Molectic - 38-848 74.467 25/05/2018 20 3 2 74 Molectic - 38-848 74.467 25/05/2018 20 3 74 Molectic - 38-848 74.467 25/05/2018 20 27<05/05/2018	-36.8416 174.666 25/05/2018 2000-01-0 Mid	Te Atatu Every muddy	4 Shivani, Ali Medium	Seaweek Cockle/Cla Austroven Venerid	ae Bivalvia Mollusca Animalia	Infauna	Count	16	9	1					
4 31.7 14 Science. 348.848 71.4 466 2/50/2012 51.8 34.7 15 Science. 348.848 71.4 568 5/50/2012 5/50/201	-36.8416 174.666 25/05/2018 2000-01-0 Mid	Te Atatu Every muddy	4 Shivani, Ali Medium	Seaweek Worm, Or Family Ort Orbiniid	ae Polychaet: Annelida Animalia	Infauna	Count	3	0	0					
3 21 74 566 -94.846 74.466 250/07/2013 200 3 24 74.566 -84.846 74.466 250/07/2013 200 3 24 74.566 -84.846 74.466 250/07/2013 200 3 24 74.566 -84.841 74.466 250/07/2013 200 10 23 74.5666 -84.843 74.467 250/07/2013 200 12 27 74.5666 -84.843 74.467 250/07/2013 200 12 27 74.5666 -84.843 74.467 250/07/2013 200 12 27 74.5666 -84.843 74.467 250/07/2013 200 12 74.5666 -84.843 74.467 250/07/2013 200 200 750/07/2013 200 200 750/07/2013 200 200 750/07/2014 200 200 200 750/07/2014 200 200 200 270/07/2014 200 200	-36.8416 174.666 25/05/2018 2000-01-0 Mid	Te Atatu Fvery muddy	4 Shivani, Ali Medium	Seaweek Worm, Blc Family Gly Glyceria	lac Polychaet: Annelida Animalia	Infauna	Count	1	0	0					
B 247 47 Science. 348-8410 74.4665 2550/0218 236 74 Science. 348-841 74.4655 2550/0218 200 236 74 Science. 348-841 74.4655 2550/0218 200 236 74 Science. 348-841 74.4655 2550/0218 200 237 74 Science. 348-841 74.465 2550/0218 200 237 74 Science. 348-843 74.467 2560/0218 200 237 74 Science. 348-843 74.469 174/0218 200 237 74 Science. 348-842	-36.8416 174.666 25/05/2018 2000-01-0 Mid	Te Atatu Every muddy	4 Shivani, Ali Medium	Seaweek Clam, Nut Linucula h Nuculid	ae Bivalvia Mollusca Animalia	Infauna	Count	1	0	0					
20 78 550 -364.841 74.665 550%/0218 000 20 74 566 -364.841 74.665 550%/0218 000 20 74 566 -364.841 74.665 550%/0218 000 20 74 566 -364.841 74.665 550%/0218 000 20 74 566 -364.841 74.667 550%/0218 000 20 74 5666 -364.843 74.667 550%/0218 000 20 74 5666 -364.843 74.667 550%/0218 000 21 74 5666 -364.843 74.667 550%/0218 000 21 74 5666 -364.843 74.667 550%/0218 000 21 74 5666 -364.843 74.667 550%/0218 000 21 74 5666 -364.843 74.667 550%/0218 000 21 74 5666 <	-36.8416 174.666 25/05/2018 2000-01-0 Mid	Te Atatu Fvery muddy	4 Shivani, Ali Medium	Seaweek Anemone, Edwardsia Edward	six Anthozoa Cnidaria Animalia	Infauna	Count	2	0	0	0 0				
20 71.4 Science. 3-48.431 74.465 5/09/0218 20 71.4 Science. 3-48.43 74.467 5/09/0218 5	-36.8431 174.665 25/05/2018 2000-01-0 Mid	Orangihini Flat mudflat	4 Cedric, Th Low	Seaweek Seaweed - Gracilaria Gracilar	ia Florideoph Rhodophy Plantae	Surface	Count	2			1 0				
20 71.4 Science. 3-48.431 7.4.695 2/95/02120 20 71.4 Science. 3-48.433 7.4.697 2/95/0213 <	-36.8431 174.665 25/05/2018 2000-01-0 Mid	Orangihin Flat mudflat	4 Cedric, Th Low	Seaweek Cockle/Cla Austroven Venerid	ae Bivalvia Mollusca Animalia	Infauna	Count	5	2	1	6 2				
237 TA Sieme, 348,433 314,467 250/(2)32 237 TA Sieme, 348,433 144,67 250/(2)32 20 237 TA Sieme, 348,433 144,67 250/(2)32 20 237 TA Sieme, 348,433 144,67 250/(2)32 20 357 TA Sieme, 348,433 144,67 250/(2)32 20 362 TA Sieme, 348,433 144,67 250/(2)32 20 37 TA Sieme, 348,433 144,67 250/(2)32 20 27 TA Sieme, 348,433 144,67 250/(2)32 20 27 TA Sieme, 348,423 144,61 151/(2)203 20 27 TA Sieme, 348,423 144,61 151/(2)203 20 27 TA Sieme, 348,423 144,61 151/(2)203 20 <t< td=""><td>-36.8431 174.665 25/05/2018 2000-01-0 Mid</td><td>Orangihin Flat mudflat</td><td>4 Cedric, Th Low</td><td>Seaweek Anemone, Anthopleu Actiniid</td><td>ae Anthozoa Cnidaria Animalia</td><td>Infauna</td><td>Count</td><td>1</td><td>1</td><td>0</td><td>0 0</td><td></td><td></td><td></td><td></td></t<>	-36.8431 174.665 25/05/2018 2000-01-0 Mid	Orangihin Flat mudflat	4 Cedric, Th Low	Seaweek Anemone, Anthopleu Actiniid	ae Anthozoa Cnidaria Animalia	Infauna	Count	1	1	0	0 0				
127 75 A Some: 3-64.83 74.697 750/0218 237 74 Some: 3-64.83 74.697 750/0218 00 237 74 Some: 3-64.83 74.691 750/0218 00 237 74 Some: 3-64.83 74.691 750/0218 00 757 550me: 3-64.828	-36.8433 174.667 25/05/2018 2000-01-0 Mid	Harbour v Mud Flats	4 Jess, Hazel Low	Seaweek Crab, Tuni Austroheli Varunid	ae Malacostr Arthropod Animalia	Surface	Count	1			2 0				
2 277 Xi Sene, -36,843 21,467 Xiyyy(2)23 20 3 277 Xi Sene, -36,843 21,467 Xiyyy(2)23 20 7 327 Xi Sene, -36,843 21,467 Xiyyy(2)23 20 9 277 Xi Sene, -36,843 21,467 Xiyyy(2)23 20 9 277 Xi Sene, -36,843 21,467 Xiyyy(2)23 20 10 277 Xi Sene, -36,843 21,467 Xiyyy(2)21 20 11 Xi Xi Sene, -36,842 21,463 Xiyyy(2)21 20 21/2 Xi Sene, -36,842 21,463 Xiyyy(2)21 20 21/2 Xi Sene, -36,842 21,463 Xiyyy(2)21 20 21/2 Xi Sene, -36,842 21,463 Xiyyy(2)20 20 21/2 Xi	-36.8433 174.667 25/05/2018 2000-01-0 Mid	Harbour v Mud Flats	4 Jess, Hazel Low	Seaweek Seaweed - Ulva sp Ulvacea	e Ulvophyce Chlorophy Plantae	Surface	Cover	2			0 0				
31 217 71.4 (Sete: -36.843) 21.4.667 2597(5)(2012) 202 32 71.4 (Sete: -36.843) 1.4.667 2597(7)(2012) 202 32 74.4 (Sete: -36.842) 1.4.661 21.74(2012) 202 34	-36.8433 174.667 25/05/2018 2000-01-0 Mid	Harbour v Mud Flats	4 Jess, Hazel Low	Seaweek Cockle/Cla Austroven Venerid	ae Bivalvia Mollusca Animalia	Surface	Cover	1			1 0				
4 237 74 Science. 346,483 314,467 2567(254) 5 237 74 Science. 346,483 144,697 2567(254) 6 237 74 Science. 346,843 144,697 2567(254) 7 75 Science. 346,843 144,697 2567(254) 7 75 Science. 346,843 144,697 2567(254) 8 237 74 Science. 346,843 144,697 2567(254) 9 237 74 Science. 346,843 144,697 2567(254) 206 10 237 74 Science. 346,843 144,697 2567(254) 206 10 237 74 Science. 346,843 144,697 2567(254) 206 10 237 74 Science. 346,843 144,691 216/2703 206 10 276 Science. 346,842 144,681 151/27031 206 10 276 Science. 346,842 144,681 151/27031 206 10 276 Science. 346,842 144,681 151/27031 207 276 Science. 346,842 144,681	-36.8433 174.667 25/05/2018 2000-01-0 Mid	Harbour v Mud Flats	4 Jess, Hazel Low	Seaweek Seaweed - Gracilaria Gracilar	ia Florideoph Rhodophy Plantae	Surface	Cover	2			1 0				
32 77 Kisene -84.843 17.467 2550/2012 202 7 78 78 -84.843 17.467 2550/2012 202 7 78 77 56 -84.843 17.467 250/2012 202 7 78 77 56 -84.843 17.467 250/2012 202 0 27 74 56 -84.843 17.467 250/2012 202 10 27 74 56 -84.843 17.467 250/2012 202 27 74 56 -84.843 17.467 250/2012 202 27 74 56 -84.843 17.467 250/2012 202 27 74 56 -84.843 17.461 151/2012 20 27 74 56 -84.842 17.461 151/2012 20 27 74 56 -84.842 17.461 151/2012 20 17.461 151/2012	-36.8433 174.667 25/05/2018 2000-01-0 Mid	Harbour v Mud Flats	4 Jess, Hazel Low	Seaweek Cockle/Cla Austroven Venerid	ae Bivalvia Mollusca Animalia	Infauna	Count	39	11	3	1 0				
B 277 K Science - 36-843 27.4 697 27.9 K Science - 36-842 27.4 697 27.4 51-867 27.4 698 27.4 698 27.4 698 27.4 698 27.4 698 27.4 51-867 27.4 6988 27.4 698	-36.8433 174.667 25/05/2018 2000-01-0 Mid	Harbour v Mud Flats	4 Jess, Hazel Low	Seaweek Clam, Wer Macomon Tellinida	e Bivalvia Mollusca Animalia	Infauna	Count	2	1	1					
237 X5 (some: 3-48-43) X5 (467) X5 (37) 237 X5 (some: 3-48-43) X5 (37) X5 (37) X5 (37) 237 X5 (some: 3-48-43) X5 (47) X5 (37) X5 (37) 237 X5 (some: 3-48-43) X5 (47) X5 (37) X5 (37) 237 X5 (some: 3-48-43) X5 (47) X5 (37) X5 (37) 237 X5 (some: 3-48-43) X5 (47) X5 (37) X5 (37) 237 X5 (some: 3-48-43) X5 (47) X5 (37) X5 (37) 237 X5 (some: 3-48-44) X5 (48) X5 (37) X5 (37) 237 X5 (some: 3-48-44) X5 (48) X5 (37) X5 (37) 237 X5 (some: 3-48-44) X5 (48) X5 (37) X5 (37) 237 X5 (some: 3-48-44) X5 (48) X5 (37) X5 (37) 237 X5 (some: 3-48-44) X5 (48) X5 (37) X5 (37) 237 X5 (some: 3-48-44) X5 (48) X5 (37) X5 (37) 237 X5 (some: 3-48-44) X5 (48) X5	-36.8433 174.667 25/05/2018 2000-01-0 Mid	Harbour v Mud Flats	4 Jess, Hazel Low	Seaweek Snail, Sma Stiracolpu Turritel	id Gastropoc Mollusca Animalia	Infauna	Count	3	1	0					
B 277 K Steme: 3-8.843 7.4697 2507(2)8 278 7 K Steme: 3-8.843 7.4697 2507(2)8 2000 277 K Steme: 3-8.843 7.4697 2507(2)8 2000 276 K Steme: 3-8.848 7.4691 2107(2)701 2000 5 707 K Steme: 3-8.8483 7.4691 2107(2)701 2000 707 K Steme: 3-8.8482 7.4681 2114(2)7127(2)701 2000 707 K Steme: 3-8.8482 7.4681 114(2)7127(2)701 2000 707 K Steme: 3-8.8482 7.4681 114(2)72018 2000 707 K Steme: 3-8.8482 7.4681 114(2)72018 2017 707 K Steme: 3-8.8482 7.4681 114	-36.8433 174.667 25/05/2018 2000-01-0 Mid	Harbour v Mud Flats	4 Jess, Hazel Low	Seaweek Barnacle, Austromin Austrob	ali Maxillipod Arthropod Animalia	Infauna	Count	3	1	1					
217 75 (some: -36.843) 71.46 (some: -36	-36.8433 174.667 25/05/2018 2000-01-0 Mid	Harbour v Mud Flats	4 Jess, Hazel Low	Seaweek Worm, Or Family Ort Orbinito	ae Polychaet: Annelida Animalia	Infauna	Count	3	0	3	0 0				
0 217 TA (See: -36.843 17.467 2)/07/013 20 2 327 TA (See: -36.843 17.467 2)/07/013 20 2 327 TA (See: -36.843 17.467 2)/07/013 20 2 72 TA (See: -36.842 17.463 17.07/013 20 2 72 TA (See: -36.842 17.463 17.47/013 20 2 72 TA (See: -36.842 17.463 17.463 17.463 17.47/013 20 2 72 TA (See: -36.842 17.463 17.463 17.47/013 20 2 72 TA (See: -36.842 17.463 17.463 17.463 17.47/013 20 2 72 TA (See: -36.842 17.463 17.463 17.463 17.47/013 20 2 72 TA (See: -36.842 17.463 17.463 17.463 17.47/013 20 2 72 TA (See: -36.842 17.463	-36.8433 174.667 25/05/2018 2000-01-0 Mid	Harbour v Mud Flats	4 Jess, Hazel Low	Seaweek Clam, Nut Linucula h Nuculid	ae Bivalvia Mollusca Animalia	Infauna	Count	4	0	0	4 8				
327 77 A Science, 3-6,8-83, 37,4-697,2509/(2018.200) 237 77 A Science, 3-6,8-83,37,1-647,2509/(2018.200) 237 77 A Science, 3-6,8-83,37,1-647,2509/(2018.200) 237 76 A Science, 3-6,8-83,27,1-646,1197/(2018.200) 237 76 A Science, 3-6,8-82,27,1-646,1197/(2018.200) 237 76 A Science, 3-6,8-82,27,1-646,1197/(2018.200) <t< td=""><td>-36.8433 174.667 25/05/2018 2000-01-0 Mid</td><td>Harbour v Mud Flats</td><td>4 Jess, Hazel Low</td><td>Seaweek Seaweed - Gracilaria Gracilar</td><td>ia Florideoph Rhodophy Plantae</td><td>Infauna</td><td>Count</td><td>4</td><td>0</td><td>0</td><td>1 0</td><td></td><td></td><td></td><td></td></t<>	-36.8433 174.667 25/05/2018 2000-01-0 Mid	Harbour v Mud Flats	4 Jess, Hazel Low	Seaweek Seaweed - Gracilaria Gracilar	ia Florideoph Rhodophy Plantae	Infauna	Count	4	0	0	1 0				
237 TA Solme, 348,493 174,497 259(2) 277 TA Solme, 348,493 174,691 200(2) 277 TA Solme, 348,493 174,691 201/2/2/2/201 200 277 TA Solme, 348,493 174,691 201/2/2/2/2/201 200 276 TA Solme, 348,493 174,691 201/2/2/2/2/201 200	-36.8433 174.667 25/05/2018 2000-01-0 Mid	Harbour v Mud Flats	4 Jess, Hazel Low	Seaweek Snail, MucCominella Buccinii	la Gastropoc Mollusca Animalia	Infauna	Count	2	0	0	0 0				
276 TAI science - 368-848 174.468 191/2/2018 276 TAI science - 368-848 174.468 191/2/2018 5 276 TAI science - 368-848 174.468 191/2/2018 5 276 TAI science - 368-848 174.468 191/2/2018 7 276 TAI science - 368-848 174.468 191/2/2018 7 276 TAI science - 368-848 174.4663 191/2/2018 9 276 TAI science - 368-848 174.6614 191/2/2018 10 276 TAI science - 368-848 174.6614 191/2/2018 10 276 TAI science - 368-848 174.6614 191/2/2018 10 276 TAI science - 368-848 174.6614 191/2/2018	-36.8433 174.667 25/05/2018 2000-01-0 Mid	Harbour v Mud Flats	4 Jess, Hazel Low	Seaweek Clam, Pipi Paphies at Mesode	sn Bivalvia Mollusca Animalia	Infauna	Count	1	0	0 1	18 23				
4 276 Tal Scienc36-842 174.661 19/12/2018 200 5 276 Tal Scienc36-842 174.661 19/12/2018 200 6 276 Tal Scienc36-842 174.661 19/12/2018 200 7 276 Tal Scienc36-8428 174.661 19/12/2018 200 8 276 Tal Scienc36-8428 174.661 19/12/2018 200 8 276 Tal Scienc36-8428 174.661 19/12/2018 200 9 276 Tal Scienc36-8428 174.661 19/12/2018 200 10 276 Tal Scienc36-8428 174.661 19/12/2018 200 11 276 Tal Scienc36-8428 174.661 19/12/2018 200 12 276 Tal Scienc36-8428 174.661 19/12/2018 200 12 276 Tal Scienc36-8428 174.661 19/12/2018 200 2 276 Tal Scienc36-8428 174.661 19/12/2018 200 2 276 Tal Scienc36-8428 174.661 19/12/2018 200	-36.8428 174.663 19/12/2018 2000-01-0 Mid	Harbourview Beach Re	7 Mels Barti Medium	Seaweek Amphipod Paracorop Corophi	idi Malacostr Arthropod Animalia	Surface	Count	70							
5 276 TA Scenec36.428 174.661 19/12/2018 200 7 76 TA Scenec36.428 174.661 19/12/2018 200 7 77 TA Scenec36.428 174.661 19/12/2018 200 276 TA Scenec36.428 174.661 19/12/2018 200	-36.8428 174.663 19/12/2018 2000-01-0 Mid	Harbourview Beach Re	7 Mels Barti Medium	Seaweek Crab, Tuni Austroheli Varunid	ae Malacostr Arthropod Animalia	Surface	Count	7							
6 276 TA Science - 36.8428 174.663 1971/22018 200 7 276 TA Science - 36.8428 174.663 1971/22018 200 80 276 TA Science - 36.8428 174.663 1971/22018 200 9 276 TA Science - 36.8428 174.663 1971/22018 200 9 276 TA Science - 36.8428 174.663 1971/22018 200 9 276 TA Science - 36.8428 174.663 1971/22018 200 9 276 TA Science - 36.8428 174.663 1971/22018 200 9 276 TA Science - 36.8428 174.663 1971/22018 200 9 276 TA Science - 36.8428 174.663 1971/22018 200	-36.8428 174.663 19/12/2018 2000-01-0 Mid	Harbourview Beach Re	7 Mels Barti Medium	Seaweek Seaweed - Ulva sp Ulvacea	e Ulvophyce Chlorophy Plantae	Surface	Cover	0.1							
7 726 TAI Science - 36.8428 174.668 19/12/2018 200 8 276 TAI Science - 36.8428 174.663 19/12/2018 200 9 756 TAI Science - 36.8428 174.663 19/12/2018 200 0 276 TAI Science - 36.8428 174.663 19/12/2018 200 0 276 TAI Science - 36.8428 174.663 19/12/2018 200 1276 TAI Science - 36.8428 174.663 19/12/2018 200 226 TAI Science - 36.8428 174.663 19/12/2018 200 22 276 TAI Science - 36.8428 174.663 19/12/2018 200 24 276 TAI Science - 36.8428 174.663 19/12/2018 200	-36.8428 174.663 19/12/2018 2000-01-0 Mid	Harbourview Beach Re	7 Mels Barti Medium	Seaweek Seaweed - Gracilaria Gracilar	ia Florideoph Rhodophy Plantae	Surface	Cover	0.1							
8 276 TAI Scienc36.8428 174.663 19/12/2018 200 9 276 TAI Scienc36.8428 174.663 19/12/2018 200 0 276 TAI Scienc36.8428 174.663 19/12/2018 200 0 276 TAI Scienc36.8428 174.663 19/12/2018 200 2 276 TAI Scienc36.8428 174.663 19/12/2018 200	-36.8428 174.663 19/12/2018 2000-01-0 Mid	Harbourview Beach Re	7 Mels Barti Medium	Seaweek Snail, MucCominella Buccinii	la Gastropoc Mollusca Animalia	Surface	Count	2			5 20				
9 276 TAI Scienc. -36.8428 174.663 19/12/2018 200 0 276 TAI Scienc. -36.8428 174.663 19/12/2018 200 1 276 TAI Scienc. -36.8428 174.663 19/12/2018 200 2 276 TAI Scienc. -36.8428 174.663 19/12/2018 200 2 276 TAI Scienc. -36.8428 174.663 19/12/2018 200 2 276 TAI Scienc. -36.8428 174.663 19/12/2018 200	-36.8428 174.663 19/12/2018 2000-01-0 Mid	Harbourview Beach Re	7 Mels Barti Medium	Seaweek Anemone, Anthopleu Actiniid	ae Anthozoa Cnidaria Animalia	Surface	Count	11			0 0				
0 276 TAI Scienc. -36.8428 174.663 19/12/2018 200 11 276 TAI Scienc. -36.8428 174.663 19/12/2018 200 12 276 TAI Scienc. -36.8428 174.663 19/12/2018 200 12 276 TAI Scienc. -36.8428 174.663 19/12/2018 200	-36.8428 174.663 19/12/2018 2000-01-0 Mid	Harbourview Beach Re	7 Mels Barti Medium	Seaweek Anemone, Edwardsia Edward	siic Anthozoa Cnidaria Animalia	Surface	Count	3			2 0				
11 276 TAI Scienc -36.8428 174.663 19/12/2018 200 12 276 TAI Scienc -36.8428 174.663 19/12/2018 200 12 276 TAI Scienc -36.8428 174.663 19/12/2018 200	-36.8428 174.663 19/12/2018 2000-01-0 Mid	Harbourview Beach Re	7 Mels Barti Medium	Seaweek Cockle/Cla Austroven Venerid	ae Bivalvia Mollusca Animalia	Infauna	Count	12	1	3	1 0				
2 276 TAI Scienc -36.8428 174.663 19/12/2018 200	-36.8428 174.663 19/12/2018 2000-01-0 Mid	Harbourview Beach Re	7 Mels Barti Medium	Seaweek Worm, Ov Family Ow Owenii:	lac Polychaet: Annelida Animalia	Infauna	Count	39	9	13	0 0				
370 741 641-64 20 8420 174 662 10 10 10 10 10 10	-36.8428 174.663 19/12/2018 2000-01-0 Mid	Harbourview Beach Re	7 Mels Barti Medium	Seaweek Worm, Ca Family Nej Nephty	da Polychaeti Annelida Animalia	Infauna	Count	2	2	0	1 3				
3 2/0 TALSCIENC -30.8428 1/4.003 19/12/2018 200	-36.8428 174.663 19/12/2018 2000-01-0 Mid	Harbourview Beach Re	7 Mels Barti Medium	Seaweek Clam, Wei Macomon Tellinida	e Bivalvia Mollusca Animalia	Infauna	Count	1	0	1	0 4				
Soft Shore Mm2 Surface	oft Shore Mm2 Surface Species	(+)				4									Þ
											1990	(TTT)			
Ready 🔝										Ħ		삔	-		+ 63%

To start, I order the data to make it a bit easier to see what's what. To do this use the ctrl and "A" keys to select all your data. Once your data is selected, right click and choose the "sort" line in the menu that appears. You can then choose to sort the data from largest to smallest or smallest to largest, choose one of these.

Your data should now be grouped by the years in which it was collected. This way it is easy for us to collate the data collected each year individually so that we can compare data across time!

Now to organise the species, highlight the Species name column and once again right click and choose 'sort' this time we are going to choose sort A-Z. This will group all the species together for us. When you choose this a text box will pop up like the one below:

Sort Warning	?	\times
Microsoft Excel found data next to your selection. Since you have not will not be sorted.	selected thi	is data, it
What do you want to do?		
Expand the selection		
O Continue with the current selection		
Sort	Car	ncel

Make sure that "Expand the selection" is the option selected as this means that all the data will move when the data is sorted.

Our species list should now be organised like the below, this allows us to see which species were observed.

Now that we can see which species we have, we are going to make a condensed species list. Like the one in the black box below.

File	Ho	ome	Inser	rt D	raw	Page Lay	yout Form	ulas Dat	a Review	v Viev	v H	lelp											
(i)	POSSIB	LE DA	ATA LOSS	Some	features r	night be	lost if you save	this workboo	k in the comn	na-delimite	ed (.csv) forn	nat. To	prese	erve t	these	feature	es, sav	re it ir	an E	cel fi	le format. Don't show	w ag
AE56		Ŧ			fx.																		
A A	в	с	D E	F	G H	1	JKL	MN	0 P Q	R S	т	U	¥	v	×	Y	z	AA	AB	AC	AD	AE	AF
1 Survey	E Surveyor L	atitude I	Longitud Date	Time	Shore Le Local	tion Location C	roup Si Group Le Survey A	Project N Species Spe	cies Taxo Far Taxo Cl	la TaxoPhy Taxok	Gn Surface	Cover or	Abundar	Core1	Core2	Core3	Core4						
3 2	8 TAISoler	-36.84	174.66 19/12/	2018 2000-01-	Mid Harbo	ourview Beac	2 Frazer D: Medium	Seaveel Amphipo Par	acore Corophie Malaco: acore Corophie Malaco:	si Arthropo Anima si Arthropo Anima	la Surface	Count	200				1 2					Amphipod, burrowing Apemone Burrowing	
4 28	0 TAIScier	-41.29	174.78 19/12/	2018 2000-01	Mid Harbo	ourviev Beac	1 Mels Barl Medium	Seaveel Amphipo Par	acore Corophile Malaco	si Arthropo Anima	lia Surface	Count	13			0	1					Anemone, Mudflat: Anemone, Tidepool	
5 23	4 TAI Scier	-36.84	174.67 25/05/	2018 2000-01-	Mid Te At	atu very mud	4 Shivani,/ Medium	Seaveel Anemony Edu	ardsi Edwardsi Anthozo	o Cnidaria Anima	lia Infauna	Count	2	0	() (0					Barnacle, beaked	
6 27	6 TAI Scier	-36.84	174.66 19/12/	2018 2000-01-	Mid Harbo	ourviev Beac	7 Mels Bart Medium	Seaveel Anemony Edu	ardsi Edvardsi Anthozo	o Cnidaria Anima	lia Surface	Count	3			2	: 0					Barnacle, Gooseneck (Calantica vilosa)	
7 2.	C TAIScier	-36.84	174.67 25/05/	2018 2000-01	Lov Urang	gihii Shallow (4 Llion, Mic Low	Seaveel Anemoni Ant	hople Actiniida Anthozo	o Unidaria Anima	lia Intauna In Intauna	Count	2	0	i i	2						Clam, Northern Luatua	
9 23	6 TAISoler	-36.84	174.66 19/12/	2018 2000-01-	Mid Harbo	gini natinudi outview Reac	7 Mels Bari Medium	Seaveel Anemony Ant	hopie Actinida Anthozo	o Coidaria Anima	la Surface	Count	11				0					Clam Pini	
10 21	8 TAI Soler	-36.84	174.66 19/12/	2018 2000-01-	Mid Harbo	ourviev Beac	2 Frazer D: Medium	Seaweel Anemony Ant	hople Actiniida Anthozo	o Cnidaria Anima	lia Infauna	Count	3	1	2	2						Clam, Wedge	
11 21	9 TAISoler	-36.84	174.66 19/12/	2018 2000-01	Lov Harbo	ourview beacl	3 Simon Gi Medium	Seaveel Anemony Ant	hople Actiniida Anthozo	o Cnidaria Anima	lia Surface	Count	8									Cookle, Small Dog	
12 2	'9 TAIScier	-36.84	174.66 19/12/	2018 2000-01	Low Harbo	ourviev beacl	3 Simon Gi Medium	Seaveel Anemony Ant	hople Actiniida Anthozo	o Cnidaria Anima	lia Infauna	Count	4	1		1						Cockle/Clam, Little-neck	
13 23	0 TAI Scier	-41.29	174.78 19/12/	2018 2000-01-	Mid Harbo	ourviev Beac	1 Mels Bart Medium	Seaveel Anemoni Ant	hople Actiniida Anthozo	o Unidaria Anima	lia Intauna	Count	1	0		1						Crab, Estuarine Pillbox	
14 2.	17 TAI Soler	-36.84	174.67 25/05/	2018 2000-01-	Mid Harbo	our (Mud Flat:	4 Jess, Haz Low 2 Erozor D: Modium	Seaveel Barnacle Aus Seaveel Barnacle Aus	trom: Austroba Maxilip: trom: Austroba Maxilip:	o: Arthropo Anima o: Arthropo Anima	lia Intauna La Surfaso	Count	3			· ·	2					Crab, Stalk Fund Mud	
16 23	3 TAI Scier	-36.84	174.67 25/05/	2018 2000-01-	Low Drap	olhi Shallov (4 Diop Mic Low	Seaveel Clam Null in	icula Nuculida Bizaliza	Mollusca Anima	la Infauna	Count	88	19	28	3						Crab Tuppeling Mud	
17 23	4 TAI Soler	-36.84	174.67 25/05/	2018 2000-01-	Mid Te At	atu very mud	4 Shivani,/ Medium	Seaveel Clam, Nu Linu	cula Nuculida Bivalvia	Mollusoa Anima	lia Infauna	Count	1	0	0	0						Diatom, Benthic	
18 23	7 TAI Soler	-36.84	174.67 25/05/	2018 2000-01-	Mid Harbo	our Mud Flat:	4 Jess,Haz Low	Seaveel Clam, Nu Line	icula Nuculida Bivalvia	Mollusca Anima	lia Infauna	Count	4	0	(0 4	8					Isopod, Sea Slater	
19 21	8 TAIScier	-36.84	174.66 19/12/	2018 2000-01	Mid Harbo	ourviev Beac	2 Frazer D: Medium	Seaveel Clam, Nu Link	icula Nuculida Bivalvia	Mollusca Anima	lia Infauna	Count	7	4		1						Isopod, Soft Shore	
20 2	9 TAI Scier	-36.84	174.66 19/12/	2018 2000-01-	Low Harbo	ourviev beacl	3 Simon Gi Medium	Seaveel Clam, Nu Lin,	ucula Nuculida Bivalvia	Mollusca Anima	lia Infauna	Count	74	17	20)) +0	- 22					Limpet, Estuarine	
21 2.	7 TAISoler	-36.84	174.67 25/05/	2018 2000-01-	Mid Harbo	our Mud Flat:	4 Jess, Haz Low	Seaveel Clam, Pip Pap Seaveel Clam, W/ May	mes Mesodes Bivalvia	Mollusca Anima Mollusca Anima	ka Intauna ka Infauna	Count	2	1		J R	23					Plant, Leigrass	
23 27	6 TAI Scier	-36.84	174.66 19/12/	2018 2000-01-	Mid Harbo	ourview Reac	7 Mels Bari Medium	Seaveel Clam, We Mar	como Tellinidar Bizalvia	Mollusca Anima	la Infauna	Count	1	0		1 C	4					Seaweed - Brown Sea Sack	
24 28	0 TAI Scier	-41.29	174.78 19/12/	2018 2000-01-	Mid Harbo	ourviev Beac	1 Mels Barl Medium	Seaweel Clam, We Mac	omo Tellinida: Bivalvia	Mollusca Anima	lia Infauna	Count	1	1	0	j T						Seaveed - Green, Fern	
25 21	8 TAI Soler	-36.84	174.66 19/12/	2018 2000-01-	Mid Harbo	ourviev Beac	2 Frazer D: Medium	Seaveel Cookle, 5 Gly	oyme Glycyme Bivalvia	Mollusca Anima	lia Infauna	Count	1	0		1 13	6					Seaveed - Green, Sealettuce	
26 23	3 TAI Soler	-36.84	174.67 25/05/	2018 2000-01	Lov Orang	gihii Shallow (4 Dion, Mic Low	Seaveel Cookle/C Aus	trove Venerida Bivalvia	Mollusca Anima	lia Infauna	Count	25	7	6	8						Seaveed - Red (Gracilaria)	
27 23	14 TAI Scier	-36.84	174.67 25/05/	2018 2000-01	Mid Te At	atu very mud	4 Shivani, / Medium	Seaveel Cockle/C Aus	trove Venerida Bivalvia	Mollusca Anima	lia Surface	Count	1									Shrimp, Sand	
28 2.	P TAIScier	-36.84	174.67 25/05/	2018 2000-01	Mid Te At	atu very mud	4 Shivani, A Medium	Seaveel LocklelL Aus	trove Venerida Bivalvia	Mollusca Anima	ka Intauna	Count	lb c	3		1 6						Shall, Ruger Seat Australian Dee Meall	
30 2	7 TAI Scier	-36.84	174.66 25/05/	2018 2000-01-	Mid Harbo	ginii Flat mudi	4 Jess Haz Low	Seaveel CockerC Aus	trove Venerida Divavia trove Venerida Bivalvia	Mollusca Anima	lia Surfano	Cover	1	2								Shail Readed Ton-Shell	
31 23	7 TAI Scier	-36.84	174.67 25/05/	2018 2000-01-	Mid Harbo	our Mud Flat:	4 Jess Haz Low	Seaveel Cockle/C Aus	trove Venerida Bivalvia	Mollusca Anima	la Infauna	Count	39	11	3	3 .	i õ					Snall Horn	
32 27	6 TAI Soler	-36.84	174.66 19/12/	2018 2000-01-	Mid Harbo	ourviev Beac	7 Mels Barl Medium	Seaveel Cookle/C Aus	trove Venerida Bivalvia	Mollusca Anima	lia Infauna	Count	12	1	3	3 .	0					Snail, Large Horn	
33 21	8 TAISoler	-36.84	174.66 19/12/	2018 2000-01	Mid Harbo	ourviev Beac	2 Frazer D: Medium	Seaveel Cookle/C Aus	trove Venerida Bivalvia	Mollusca Anima	lia Infauna	Count	43	13	14	4 C	0					Snail, Large Ostrich Foot	
34 2	'9 TAIScier	-36.84	174.66 19/12/	2018 2000-01	Low Harbo	ourviev beacl	3 Simon Gi Medium	Seaveel CooklelC Aus	trove Venerida Bivalvia	Mollusca Anima	lia Infauna	Count	24	9		3						Snail, Lined Whelk	
35 28	0 TAI Scier	-41.29	174.78 19/12/	2018 2000-01-	Mid Harbo	ourviev Beac	1 Mels Bart Medium	Seaveel Cockle/C Aus	trove Venerida Bivalvia	Mollusca Anima	lia Surface	Count	3	2		-						Snail, Mud	
35 20	8 Tál Salar	-36.84	174.66 19/12/	2018 2000-01-	Mid Harbo	ourviev Beac	2 Erazor D: Modium	Seaveel Cockerc Hus	nove Venerida Divavia oproj Humonov Malacov	 Molusca Anima d drikkopo Anima 	la Infauna la Infauna	Count	20	0	-	1 4	13					Seal Mudiar Ubali	
38 2	3 TAI Scier	-36.84	174.67 25/05/	2018 2000-01-	Low Dran	olhi Shallov (4 Diop Mic Low	Seaveel Crab Tur Aus	trohe Varunida Malaco.	st Arthropo Anima	la Infauna	Count	i	1	(i i	1.5					Snall Olive Bubble	
39 23	7 TAI Scier	-36.84	174.67 25/05/	2018 2000-01-	Mid Harbo	our Mud Flat:	4 Joss Haz Low	Seaweel Crab, Tui Aus	trohe Varunida Malaco	si Arthropo Anima	la Surface	Count	1			2	0					Snall, Small Turret (Stiracolpus pagoda)	
40 21	6 TAISoler	-36.84	174.66 19/12/	2018 2000-01-	Mid Harbo	ourviev Beac	7 Mels Barl Medium	Seavreel Crab, Tui Aus	trohe Varunida Malaco:	si Arthropo Anima	lia Surface	Count	7									Snail, Speckled Whelk	
41 21	8 TAISoler	-36.84	174.66 19/12/	2018 2000-01	Mid Harbo	ourview Beac	2 Frazer D: Medium	Seaveel Crab, Tui Aus	trohe Varunida Malaco:	si Arthropo Anima	lia Surface	Count	4									Snail, Spotted Top-Shell	
42 2	8 TAIScier	-36.84	174.66 19/12/	2018 2000-01	Mid Harbo	ourview Beac	2 Frazer D: Medium 2 Simon G: M- 1	Seaveel Crab, Tur Aus	trohe Varunida Malaco: teolog Varunida M	st Arthropo Anima	ka Intauna ka Sudarri	Count	20	1	(Worm, Bamboo	
44 2	9 TAIScier	-36.84	174.66 19/12/	2018 2000-01-	Low Harbo	ourviev beact	3 Simon Gi Medium	Seaveel Crab, rui Aus	trohe Varunida Malaco: trohe Varunida Malaco:	si Arthropo Anima si Arthropo Anima	la lofaina	Count	20	1	-		1 1					Worm Cat	
45 28	0 TAI Scier	-41.29	174.78 19/12/	2018 2000-01-	Mid Harbo	ourviev Beac	1 Mels Bari Medium	Seaveel Crab, Tur Aus	trohe Varunida Malaco:	si Arthropo Anima	la Surface	Count	6				7					Worm, Flat	
46 21	8 TAI Soler	-36.84	174.66 19/12/	2018 2000-01-	Mid Harbo	ourviev Beac	2 Frazer D; Medium	Seaweel Limpet, E Not	oaorr Lottidae Gastrop	oc Mollusca Anima	la Surface	Count	1			Č	1					Worm, Lug	
47 21	8 TAI Soler	-36.84	174.66 19/12/	2018 2000-01	Mid Harbo	ourviev Beac	2 Frazer D: Medium	Seaveel Limpet, E Not	oaorr Lottidae Gastrop	oc Mollusoa Anima	lia Infauna	Count	5	1	0	3						Worm, Opheliid	
48 23	13 TAI Soler	-36.84	174.67 25/05/	2018 2000-01	Low Orang	gihii Shallow (4 Dion, Mic Low	Seaveel Seaveer Uks	asp UlvacearUlvophy	y: Chloroph Planta	e Surface	Cover	1									Worm, Orbiniid Polychaete	
49 23	7 TAI Scier	-36.84	174.67 25/05/	2018 2000-01-	Mid Harbo	our (Mud Flat:	4 Jess, Haz Low	Seaveel Seaveer Uk	sp UlvacearUlvophy	c Chloroph Planta	e Surface	Cover	2			0	0					Worm, Oveniid	
51 23	8 TAISoler	-36.84	174.66 19/12/	2018 2000-01-	Mid Hala	ourviev Beac	2 Frazar Di Medium	Seaveer Seaveer Ukr	sp Uvacea(Uvoph)	v: Chloroph Planta	e Surface	Cover	0.5				1					Worm, Hag Worm, Bag (Canitella canitata)	
52 2	9 TAI Scier	-36.84	174.66 19/12/	2018 2000-01	Lov Harbo	ourviev beacl	3 Simon Gi Medium	Seaveel Seaveer Uk	sp Ulvacear Ulvoph	v: Chloroph Planta	e Surface	Cover	3				1					Worm Bibbon	
53 28	0 TAI Soler	-41.29	174.78 19/12/	2018 2000-01-	Mid Harbo	ourview Beac	1 Mels Bari Medium	Seaweel Seaweer Ulw	sp Ulvacear Ulvoph	c Chloroph Planta	e Surface	Cover	1			2	3						
54 23	3 TAI Soler	-36.84	174.67 25/05/	2018 2000-01	Lov Orang	gihii Shallow (4 Dion, Mic Low	Seaveel Seaveer Gra	cilari: Gracilari: Florideo	c Rhodoph Planta	e Surface	Cover	4										
55 23	6 TAI Scier	-36.84	174.66 25/05/	2018 2000-01	Mid Orang	gihii Flat mudl	4 Cedric, T Low	Seaveel Seaveer Gra	cilarii Gracilarii Florideo	og Rhodoph Planta	e Surface	Count	2				1 0						
56 2.	7 TAIScier	-36.84	1/4.67 25/05/	2018 2000-01	Mid Harbo	our (Mud Flat:	4 Jess,Haz Low	Seaveel Seaveer Gra	cilarii Gracilarii Floridec	or Rhodoph Planta	e Surface	Cover	2				0					<u> </u>	
4		coff	tchoroo	. 0													1	1					
	·	5011	isnoree	<u> </u>	Ð																		
																							51
Ready	EO																						1
																						the second s	

Now that we have a species list, we are going to average the abundance data for each species in each year to make a table like the below.

You can do this quickly using the equations functions in excel to average the data you select.

						2018	2019	2020	2021			
	Amphipod, Burrowing					=AVERAC	GE()					
	Anemo	one, Burr	owing					- ,		r 01		
	Anemo	one, Mud	flat : Aner	mone, Tid	lepool	AVE	RAGE	:(num	1ber1;	[number2];)	
	Barna	cle.beak	ed						-			
	Barna	cle. Goos	eneck (C	alantica	villosa)							
	Clam.	Northern	Tuatua									
	Clam	Nut										
	Clam	Pipi										
	Clam	Wedae										
	Cockle	a Small D	loa									
	Cockle	a/Clam Li	ittla-nack	ck								
	Crab F	Estuarina	Pillboy	`								
	Crab, I	Daddla	FIIDOA									
	Crab, r	Padule Puelli Euro	J M. J									
	Urab, a	otaik Eye	amua									
V	W	Х	Y	Z	AA	AB	AC	AD		AE	AF	AG
C Abundance	Core1	Core2	Core3	Core4							2018	20
70									Amphipod,	Burrowing	=AVERAGE(V2	2:V4)
200			1	1 3	2				Anemone, E	Burrowing	AVERAG	E(n)
13			(D ::	1				Anemone, M	Audflat : Anemone, Tide	pool	
2	C) () () (0				Barnacle, b	eaked		
3			1	2 (0				Barnacle, G	ooseneck (Calantica ville	osa)	
2	0) 2	2						Clam, North	iern Tuatua		
1	1	ι () (0 (0				Clam, Nut			
11			(0 (C				Clam, Pipi			
3	1	L 2	2						Clam, Wedg	ge		
8									Cockle, Sma	III Dog		
4	1	L 1	L						Cockle/Clar	n, Little-neck		
1	C) ()						Crab, Estua	rine Pillbox		
3	1	L 1	1						Crab, Paddl	e		
6			(0	2				Crab, Stalk	Eyed Mud		
88	19	9 28	3						Crab, Tunne	elling Mud		
1	C) ()						Diatom, Ber	nthic		
4	0) () /	4 8	3				Isopod, Sea	Slater		
7	4	۱ 1	L						Isopod, Soft	Shore		
74	17	7 20)						Limpet, Est	uarine		
1	C) (0 18	B 23	3				Plant, Eelgr	ass		
2	1	L 1	1						Plant, Mang	rove		
1	0) 1	1 (0 4	4				Seaweed -	Brown, Sea Sack		
1	1	ι ()						Seaweed -	Green, Fern		
1	C) 1	1 13	3 (5				Seaweed -	Green, Sea lettuce		
25	7	7 6	5						Seaweed -	Red (Gracilaria)		
1									Shrimp, San	d		
16	9	9 1	1						Snail, Auger			
5	2	2 1	1 6	5	2				Snail, Austr	alian Dog Whelk		
1			1	1 (C				Snail, Beade	ed Top-Shell		
39	11	L 3	3 1	1 (0				Snail, Horn			
12	1	L 3	3 1	1 ()				Snail, Large	Horn		

After doing this for all of your species you should have made a table that looks something like this:

Species	2018	2019	2020	2021
Amphipod, Burrowing	94.33333	30	0	0
Anemone, Burrowing	2.5	8	0	0
Anemone, Mudflat : Anemone, Tidepool	4.285714	24.5	1	0
Barnacle, beaked	4.5	0	0	5
Barnacle, Gooseneck (Calantica villosa)	0	0	0	4
Clam, Northern Tuatua	0	1	0	0
Clam, Nut	34.8	2	21	3
Clam, Pipi	0	0	0	0
Clam, Wedge	1.333333	1.5	24	1
Cockle, Small Dog	1	0	0	0
Cockle/Clam, Little-neck	17.63636	20.22222	19	8.4
Crab, Estuarine Pillbox	1	0	0	1
Crab, Paddle	0	0	0	1
Crab. Stalk Eved Mud	0	1	0	0
Crab. Tunnelling Mud	5.875	1.4	0	2
Diatom, Benthic	0	0.2	0	0
Isonod Sea Slater	0	85	35	0
Isopod, Soft Shore	0	10	0	0
Limpet Estuarine	3	10	0	1
Plant Felgrass	0	1	0	5
Plant Mangrovo	0	1	0	1
Seawood - Brown Sea Sack	0	0	0	1
Seaweed - Brown, Sea Sack	0	0	2	1
Seaweed - Green, Ferri	1 266667	E 275	2	0
Seaweed - Green, Sea lettuce	1.200007	5.575	0	0.75
Sedweed - Ked (Gracilaria)	2.273	4	0	0.75
Shrimp, Sanu	0	00	0	0
Shall, Auger	0	0	0	3
Shall, Australian Dog wheik	0	6	0	0
	0	0	0	6.5
Shall, Horn	10.75	2.333333	5	10
Snall, Large Horn	0	4	0	0
Snail, Large Ostrich Foot	0	0	0	1
Snail, Lined Whelk	0	0	15	0
Snail, Mud	0	1	0	0
Snail, Mudflat Top–Shell (D. subrostrata)	6	4	5.5	1
Snail, Mudflat Whelk	4.285714	8.7	36	8.090909
Snail, Olive Bubble	0	1	0	0
Snail, Small Turret (Stiracolpus pagoda)	2	1.5	0	3
Snail, Speckled Whelk	28	0	0	0
Snail, Spotted Top–Shell	0	3	0	0
Worm, Bamboo	56.5	3	0	2.428571
Worm, Blood	1	0	4	0
Worm, Cat	4	0	0	0
Worm, Flat	0	1	0	0
Worm, Lug	2	2	0	0
Worm, Opheliid	0	1	0	0
Worm, Orbiniid Polychaete	2.666667	1	2	1
Worm, Oweniid	29.75	0	0	0
Worm, Rag	1	2	4	0
Worm, Rag (Capitella capitata)	0	1	0	0
Worm, Ribbon	0	2.833333	5	1.5

Once we have all the average abundance data for each species for each year. We need to separate the animals from the seaweeds because we measure seaweeds in percent cover whilst we count animals.

	AL	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AIVI	AN	1
-	Species	2018	2019	2020	2021			2018	2019	2020	2021		_
Ť	Openies Ameliana Rumanian	94 200	2010	2020	2021		Serviced - Prove See Seek	2010	2013	2020	1 2021		-
ť	Ampripod, Danowing	34.333	00	0	0		Seaweed - Drown, Sea Sack	0	0	2			
ť	Anemone, burrowing	4.2057	24 5		0		Seaweed - Green, rem	12667	E 27E	2	0		
Ľ	Anemone, Mudriat: Anemone, Lidepool	4.200 r	24.5				Seaweed - Green, Sea lettuce	1.2007	5.315	0	0.75		
H	Darnacle, beaked	4.5	0	0	5		Deaweed - Red (Gracilaria)	2.215	4	0	0.75		
H	Barnacle, Gooseneck (Calantica villosa). Clam, Navibare Tuatua	0	1	0	4		Plant, Leigrass	0	1	0	- 5		
E	Ciam, Norment ruatua	24.0					Fland, Mangrove	0	0	0	1		-
Ľ	Clam, Nut	34.0	2	21	3								
Ľ	Ciam, Pipi	1 0000	15	0	0								
Ł	Liam, wedge	1.3333	1.5	24									
Ľ	Cockle, Small Dog	17,000	0	10	0								
Ľ	Lockle/Llam, Little-neck	17.636	20.22	19	8.4								-
Ľ	Urab, Estuarine Pillbox	1	U	U	1								
Ľ	Urab, Paddle	U	U	U	1								
Ľ	Crab, Stalk Eyed Mud	0	1	0	0								
Ľ	Crab, Tunnelling Mud	5.875	1.4	0	2								
l	Diatom, Benthic	0	0.2	0	0								
Ľ	lsopod, Sea Slater	0	8.5	35	0								
Ľ	lsopod, Soft Shore	0	10	0	0								
l	Limpet, Estuarine	3	1	0	1								
Ŀ	Shrimp, Sand	0	60	0	0								
Ľ	Snail, Auger	0	0	0	3								
Ŀ	Snail, Australian Dog Whelk	0	6	0	0								
1	Snail, Beaded Top-Shell	0	0	0	6.5								
	Snail, Horn	10.75	2.333	5	10								
1	Snail, Large Horn	0	4	0	0								
E	Snail, Large Ostrich Foot	0	0	0	1								
	Snail, Lined Whelk	0	0	15	0								
	Snail, Mud	0	1	0	0								
1	Snail, Mudflat Top-Shell (D. subrostrata)	6	4	5.5	1								
1	Snail, Mudflat Whelk	4.2857	8.7	36	8.0909								
1	Snail, Olive Bubble	0	1	0	0								
Ŀ	Snail, Small Turret (Stiracolpus pagoda)	2	1.5	0	3								
Ŀ	Snail, Speckled Whelk	28	0	0	0								
Ŀ	Snail, Spotted Top-Shell	0	3	0	0								-
ľ	Worm, Bamboo	56.5	3	0	2,4286								-
ŀ	Worm, Blood	1	0	4	0								-
ŀ	Worm. Cat	4	Ō	Ó	Ō								-
Þ	Worm Elat	O	1	- 0	0								-
t	Worm Lug	2	2	Ū.	Ŭ.								-
Þ	Worm Opheliid	- 0	1	Ū.	Ū.								-
t	Worm Orbiniid Polychaete	2 6667	1	2	1								-
ŀ	Worm Oweniid	29.75	0	0	, D								-
h	Worm Bag	20.10	2	4	0								-
ŀ	Worm, Pag (Capitella capitata)	0	- 1	- 4	0								
ŀ	Worm, nag (Capitelia Capitata) Worm, Ribbon		2,833	5	15								-
L	# offit, 1100001	0	2.000	J									

This is a quick job of turning your one species table into two, like below:

Now we can make graphs showing how the abundance of each species has changed over time.

To do this, we highlight the data we want to graph and in the insert tab we click on the 'Recommended Charts' icon, this will show you a range of graphs that can be made from your data. Example of this below.

Auto	Save (Off	日 り	• (?' ~ ® • =	softsl	noree	< -			Q Sear	ch						
File	Ho	ome	Insert	Draw Page Layout	Forr	nulas	D	ata	Re	view	View H	lelp					
PivotTa	ble Re	comme PivotTab	nded Ta	e Illustrations	dd-ins	v V V	R	ecomr Cha	? nende arts	↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓		Maps	PivotC	l Lhart	3D Map	€ -	Line Colu E Win,
AH8	ʻIr	nsert	tab	\checkmark f_x	Add-Ins						"F	Recor	nme	nde	d Ch	arts	lcon
X 1 Core2	Y Core3	Z Core4	AA AI	AC	AD	AE	AF	AG	AH		AI	AJ	AK	AL	AM	AN	AO
2 3 4 5 0 6	1 0 0 2	2 1 0 0 0		Species Amphipod, Burrowing Anemone, Burrowing Anemone, Mudflat : Anemone, Tidepool	2018 94.3333 2.5 4.28571	2019 30 8 24.5	2020 0 0 1	2021 0 0 0		Species Seaweed - I Seaweed - I Seaweed - I	Brown, Sea Sack Green, Fern Green, Sea lettuce	2018 0 1.26667	2019 0 0 5.375	2020 0 2 0	2021 1 0 0		
7 2 8 0 9 10 2 11	0	0 0		Barnacle, beaked Barnacle, Gooseneck (Calantica villosa) Clam, Northern Tuatua Clam, Nut Clam, Pipi	4.5 0 0 34.8 0	0 0 1 2 0	0 0 0 21 0	5 4 0 3 0		Seaweed - I	Red (Gracilaria)	2.275	4	0	0.75		
12 1 13 0 14 1 15 16 28	0	2		Clam, Wedge Cockle, Small Dog Cockle/Clam, Little-neck Crab, Estuarine Pillbox Crab, Paddle	1.33333 1 17.6364 1 0	1.5 0 20.222 0 0	24 0 19 0 0	1 0 8.4 1									
17 0 18 0 19 1 20 20 21 0	4	8		Crab, Stalk Eyed Mud Crab, Tunnelling Mud Diatom, Benthic Isopod, Sea Slater Isopod, Soft Shore	0 5.875 0 0	1 1.4 0.2 8.5 10	0 0 35 0	0 2 0 0									
2 1 23 1 24 0 25 1 26 6	0	6		Limpet, Estuarine Plant, Eelgrass Plant, Mangrove Shrimp, Sand Snail, Auger	3 0 0 0 0	1 1 60 0	0 0 0 0	1 5 1 0 3									
7 8 1 9 1 0 31 3	6 1 1	i 2 0		Snail, Australian Dog Whelk Snail, Beaded Top-Shell Snail, Horn Snail, Large Horn Snail, Large Ostrich Foot	0 0 10.75 0	6 0 2.3333 4 0	0 0 5 0 0	0 6.5 10 0 1									
2 3 (3 14 (4 3 (5 (6 5	0	000		Snail, Lined Whelk Snail, Mud Snail, Mudflat Top-Shell (D. subrostrata) Snail, Mudflat Whelk Snail, Olive Bubble	0 0 4.28571 0	0 1 4 8.7 1	15 0 5.5 36 0	0 0 1 8.09091 0									
7 1 8 0 9	2	13		Snail, Small Turret (Stiracolpus pagoda) Snail, Speckled Whelk Snail, Spotted Top-Shell Worm, Bamboo Worm, Blood	2 28 0 56.5	1.5 0 3 3	0	3 0 2.42857									
20	1	1 softsl	noreex	Worm, Cat	4	0	0	0								: 4	
Ready	Ē0																



Once we have done this, you should have made graphs that look similar to these.





Now that we know how to make graphs we can make graphs that help us to answer questions we may have about the data we have collected.



For instance, I could ask the question, how does the abundance of snails change over time at this site?

Using this graph, I can see that the most species of snail were observed in 2021 as the yellow bar is the most common. From this graph, I can also see how the abundance of each snail species has changed over time, for instance the mudflat whelk was most abundant in 2020.

Using the other data this spreadsheet gives us. For example, the graph below give information as to the number of observations, lines of data, per year.



To add information to the graphs you are making, the "Quick Layout" and "Add Chart Element" Buttons can help you change how the graph looks and what titles it has.

Home Sert Draw	Page Layout Formulas Data Revie	w View Help Chart Design Format		🖻 Share 🛛 🖓 Comments
l 📠 🖣 🗔				
Chart Quick Chinge		• 11. • 11.• 11.• 11.•	Switch Row/ Select Ch Column Data Chai	ange Move rt Type Chart
hart Lavouts	Char	t Styles	Data T	ype Location
t9 - i 🗙 🗸 ƒx	6e			
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Int Int Int Int Mathematic Res Parall Res Parall Res Parall Res Mathematic Res <t< td=""><td>O P A B T U U V</td><td>AB AC AD AD</td><td>AF AP AB AH AB 91 202 2020</td></t<>	O P A B T U U V	AB AC AD	AF AP AB AH AB 91 202 2020