

www.girtsd.org

Introduction

- Background
- GIRT as part of PhD research project
- GIRT administration and method
- Diver motivation survey
- Adopt-a-Wreck
- Survey reporting
- Linking other citizen science programs

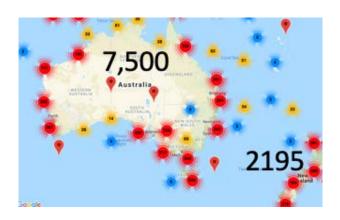


SMS *Emden* (1916) North Keeling Island, Indian Ocean



Background





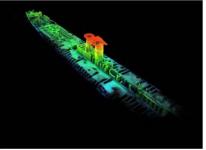


Underwater Cultural Heritage Act 2018

No. 85, 2018

An Act to protect Australia's underwater cultural heritage, and for related purposes

Management balances protection of shipwrecks with maintaining public access for recreational, scientific and educational purposes



J class-Submarine courtesy Heritage Victoria Thorough documentation is required to assess UCH site condition

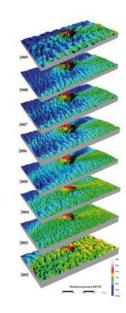


Background









Sequence of multibeam images from the BZN 10 wreck 2002-2009. RCE Netherlands



Can public archaeology inform science based underwater cultural heritage management?

- understand the condition of shipwrecks and the factors driving their preservation or deterioration (site formation processes)
- understand who is interested to participate in this citizen science project and whether their motivation changes throughout the course of their participation (questionnaire)



GIRT administration

	GIRT Scientific Divers	Surface Sheet	GIRT South Stee	Mud Map - Fair Copy	GIRT Scientific Disease	Underwater Data Sheet	GIRT Scientific Olivers	Photo Condition Survey	GIRT Scientific Diver	Vide	eo Transect & Photogra	ammetry Surve
	Site: (Name of Wreck, Year of Sinking) Statutory Database No:	Diver/s Name:	Location:	Date:	Site: (Name of Wreck)	Diver/s Name:	Name of Site: Location:	Diver/s Name: Date:	Name of Site: Location:	0	Diver/s Name:	
	Name of Statutory Database: Number of surveys you have conducted at this site:	Date: Time of Survey:	2 2 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	6 7 B	Location:	Date and Time:	Mud Map Feature / Location Time Original (m)	Direction No of Observation of physical condition, photo taken Photos biological growth and sediment over	Camera System and Lens:	Data Format:	II AM	ngth of Video Recording:
CTDT	Location (i.e. Latitude -18.6582, Longitude 146.489) Lat:	Position Format (Tick One) Degrees and Decemal Minutes holds on some or	5 Please add: North Arrow, Scale and 10 Key	9 10 Features (eg. anchor).	Water Temperature at (°C) Surface Current on Site (og. 2 knots NE)	Visibility in water (Sim 5-10m >30 m (Circle one) Site Grientation Upright Upside down Lying on port side Lying on starboard			Mud Map Name / Description of Location 'A'	Depth Compass CR at A bearing gri	Observation of condition and biologic growth at A. Sediment height near leature.	(Tak One)
471	Long: Circle one: Stern Midships Bow	Cectinal Degrees hobbi abddel Oegrees, Minutes and Seconds hobbe now is a common comm		Evidence of Structural Collapse (photograph) County	Listing port Listing to starboard Composition of Doninant Wireck			Mud Map Name / Description of Grid No. Location 'B'	Depth Compass OR at B bearing gr [m] from 8 so A fee	Observation of condition and biologic growth at B. Sediment height near leature.	2-2m 3m >3m >3m poal Height of swim over from 8 to A (Tick One)	
Scientific Divers	WG5.84 NZGD2000 Other:	0 - 1 nm			Penditon/s Description of lowest point [LP] on wrack [Mark LP location on mad major.]	Material Visible Wood Depth (m) and (m) Temperature (C) at II-P on wreck			Emure points A and 8 are marked on Mud May between these features.	and are 'fixed features' on the s		12 Sec. 1-2
DIVE INTO AN OCEAN FULL OF HISTORY	Current at Surface: North: Spend in Spots. Title directions) North Spots. Title directions) North Spots	Tide at Survey Low (Tak one) Elab			Site Dimensions (approx. in (n)) (seprox. in (n)) (conversi Seabod)	Mobility of Sediment Surface (i.e. rispling - direction and spatial frequency (cgm) Sediment Gradation				miber & Name jeg. Feature 1		Depth of Coded Target
	East South East Eit Inct = 30.1 meters per moute or 1.25 km per hour) South South West	East Frood South East High South		Topography Near Side Flat Crest Slope Sediment Slope on Flat (1 - 2m variation)	w Side Flat Crest Slope Over Side (Mark area on mud map and hotograph) Flat (1-3m variation) General composition Coral Limestone outcroppings							
Guidance document for members	monute of 3.85 km per flour) West North-West	1	2			(Circle most relevant) Clay Seeweed Seagrass Percentage of 0 - 20% 21 - 40% sourceage on exposed						
	Freshwater/Saltwater Ym - River Ym - River Ym - Spring Yes - Fun CFT Yes - See Wat	Visible in Water No	2		(Circle one) #1 - 100% Evidence of Active Yes No Carrosion	West reasons E1 - 100% [Cecia one] Evidence of Seasonal or Senso Mindone						+
VB/BION21 1	No	Surface Sheet - Continued on Next Page - Page 1/1	500 2 3 4 5 6	7	Deptito Prestion/s:	Exposure Yes No Underwater Data Sheet		Photo Condition Survey			Video Transect & Pho	otogrammetry Survey

Guidelines Survey 1 Survey 2 Survey 3 Survey 4 Survey 5

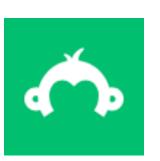


Can public archaeology inform science based underwater cultural heritage management? - Motivation questionnaire













Adopt-a-wreck

Devised by Chris Underwood

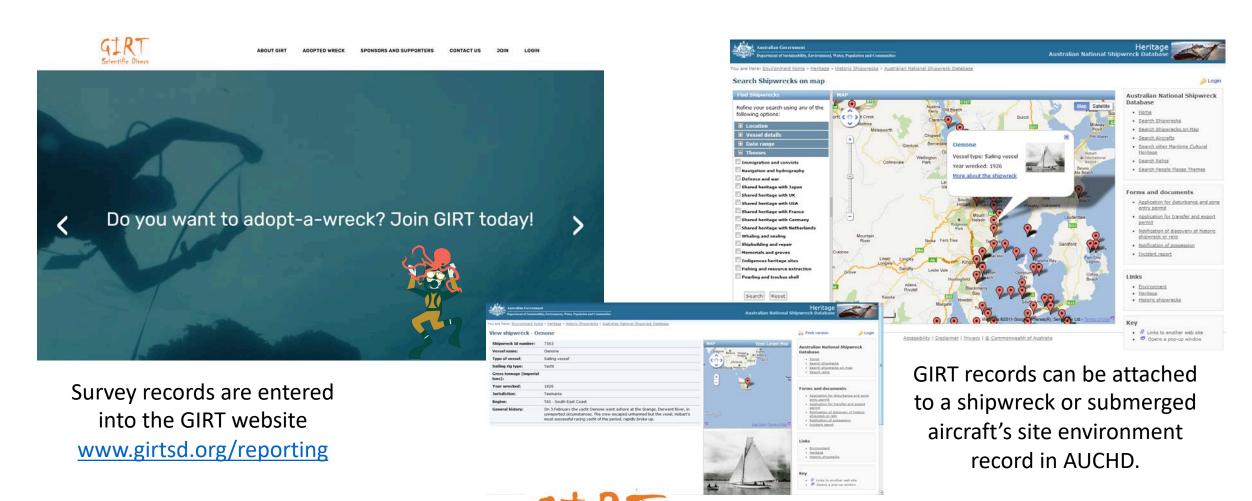
• The scheme serves as a way of encouraging the public to actively record the sites they are visiting. In the UK, everyone who has adopted a site is encouraged to submit their work for the annual 'Adopt a Wreck Award'.





www.nauticalarchaeologysociety. org/content/adopt-wreck-scheme

Survey Reporting - GIRT website and AUCHD



Linking other citizen sciences

a holistic approach – sharing data















Rapid Mo	onitori	ng		TOWN COM	Bios Government Service Book Park Audion's	1	¥EYE ≋ REE	F. 🕸	peensla overnme	
Observer name:				Phone:			Da	Date:		
Email:				Organisation:			Tie	ne:		
Vessel:									ditional	
Number of visits to a reef		Survey experience (approximate number of surveys completes	ce er	(tick one)		ind	lustry	OW		
Reef ID (e.g. 16-02)	Dt	Reef name:				Site:				
Tick one CDI non		Degrees (preferred)		ees Decimal Mins D			Park Zone: Water te	mperature:		
Survey type (tick	one)t 🗆 Snor	rkel 🗆 Dive	☐ Viewir	ng bucket			Survey d	epth:	metres	
Habitat type (circle one) Flood plume (circle one) LAGOON FLAT CREST SLOPE YES NO			2000	were a larger and the second of the second o			t survey (circle one) MID HIGH			
Timed swim (1	() minutes)	1					See over pag	e for survey met/	odologi	
ANIMALS	TALLY		TOTAL	ANIMALS	SIZE / SEX /	TYPE	TALLY		TOTAL	
Sea cucumber (all species				Coral trout (at species)	<38cm >38cm					
Giant clam				Manri	Male	-				
(larger than size of hand)	3			wrasse	Female					
Anemonefish				Turtle (all species)	Green Turtle					
the elected	lo l			495	Hawksbill To	rtie*			1	
Butterflyfish (all species)	-			*See images over page	Other (please	namej				
40				Shark (altopedes)	Whitetip ree	f shark				
Grazing herbivores				1	Blacktip ree	Department of				
conclude To	No.				Other please				-	
Cods and groupers (over Storn in length)	100			Crown-of- thoms starfish	s Size of har	- C				
☐ 360° survey	(One 5 met	re radius circle)	9		See	over page	for information guide	and survey meti	hodology	
BENTHOS		The state of the s	CORAL	MPACTS (Complete 1, 2 and	below. Circle Y	r Ni				
Insert % for each bentho Type to total 100%	tises to five each benshos type to total 100%			my coral white?		3 Is any rubbish present? Y/N				
Macroalgae		C MES	Is living corol tissue present? Y/N If yes: BLEACHING			Number of p	ieces in survey a	rea:		
Live coral	A	ACRONICAL -	for the second of the second o				Fishing line Netting	Plastic Rope	******	
Recently dead coral (white)	-84	ana.	If yes, by what? How many seen? On							
Live coral rock	1			Crown-of-thorns start Juveniles hip of hon						
Coral rubble		2500c		Adults (larger than siz	r of hand)	2701010	_			
Sand	-	INE CORAL •	Drupella snalls (all sized IMPACT DETAILS IMPACT DETAILS Idea much blenching predation of damage? Other impacts) Other impacts)					isease,		
Total 100 9	· William			~			Windshill .			
PHOTOS TAKEN	1		somet	hing else?	/N //yes: CO	MPETITIC	ON .			
Pinesse provide details: BCCNITY DEAD CORE, CORE, DOCK pinesse on America, wheel it is, and a description) CORE, BOCK DISTRIBUTE SAND CORE, BOCK DISTRIBUTE SAND		Ify	2 is any coral broken or damaged? Y / N If yes: What is the likely main cause? (Circle one)				OTHER THINGS OF INTEREST? (Mating, spowning, behaviour, etc.)			
		LE SAND		Animal Vessel An	-					

Eye on the Reef



PS Phoenix (1855), Torres Strait

References

- Training Manual for the UNESCO Foundation Course on the Protection and Management of Underwater Cultural Heritage in Asia and the Pacific
- Nautical Archaeology Society (NAS) Adopt-a-Wreck
- Australasian Underwater Cultural Heritage Database



Andrew Viduka PhD Candidate

This project has been approved by the Human Research Ethics Committee of the University of New England









