

# Town Marie Historical Archaeology Field School, Australia Course ID: TBD June 16 – July 13, 2024 Academic Credits: TBD Semester Credit Units

## FIELD SCHOOL DIRECTORS

**Dr. Serena Love**, Principal Research Archaeologist Everick Foundation, Honorary Research Fellow School of Social Science, University of Queensland (<u>s.love@everick.net.au</u>)

**Dr. Benjamin J. Schoville**, Senior Archaeologist Everick Foundation, Honorary Research Fellow School of Social Science, University of Queensland (<u>b.schoville@everick.net.au</u>)



#### OVERVIEW

On the outskirts of Brisbane, Australia, is the abandoned historical settlement of Town Marie. The site had been completely forgotten until a local historian stumbled across the name and began to delve into the archival records. Our excavations are starting to uncover a rich and meaningful record of the socio-economic and industrial conditions present within this self-contained township. Rapid urban development in the region has seen the loss of many historical places and Town Marie provides a unique

snapshot of a thriving industrial village during a relatively short period of time between 1848 and 1880. In particular, it shines a spotlight on the enigmatic boiling down industry, which involved extracting the fat from animal bones to produce tallow, a.k.a. 'trotter oil', that was used in candles and soaps, among other products. The industry provided a vital economic boost prior to the separation of Queensland and New South Wales, during the post-convict labor and pre-gold rush eras of Australia. The site was also a key node of the larger political environment of British colonization in Australia, including significant labour by South Sea Islander and Aboriginal communities whose stories are often overlooked in historical narratives of the region.

The remains of Town Marie are now located on top and beneath the surface of a private cattle grazing property in an agricultural area between Brisbane and Ipswich, Queensland. The site is situated on the banks of the Bremer River, whose periodic flooding has both obliterated some parts of the site and preserved other parts under thick silty flood sediments. Our first excavations actually began across the Bremer River from Town Marie at the Bremer Mills boiling down site in 2021. Both properties were once owned by James Ivory, an important industrial developer who kept a diary of many activities at the site. This provides crucial background to the lives of managers, workers, and laborers at the site. Life events including weddings, deaths, and marriages are recorded, a tangible glimpse into Australia's frontier life 150 years ago.

Research at Town Marie uses cutting edge archaeological techniques focused on reconstructing the structures and lifeways of a historical township. The property once included workers cottages, a tramway, wharf, sawmill, and boiling down works – the remnants of which have been the focus of excavations since 2022. Dense deposits of animal bone and charcoal are key find types, therefore zooarchaeology, archaeobotany and historical archaeology are specializations all participants will engage with. The site has a unique formation history, and students will use a total station to capture the physical relationship between artefacts. These datasets will help answer the following questions:

(1) What can be learned about the invisible social aspects of early Ipswich industry, namely the presence of South Sea Islander and Aboriginal Communities?

(2) what can archaeological findings reveal about the local state, national and international socio-economic conditions of mid to late 19<sup>th</sup> century?

Furthermore, participants will learn more about Australian cultural heritage management and learn about assessing the significance of poorly understood sites like Town Marie.

## ACADEMIC CREDIT UNITS & TRANSCRIPTS

**Credit Units**: Attending students will be awarded semester credit units through our academic partner, Connecticut College. Connecticut College is a highly ranked liberal arts institution with a deep commitment to undergraduate education. Students will receive a letter grade for attending this field school (see assessment, below). This field school provides a minimum of 270 hours of experiential education. Students are encouraged to discuss the transferability of credit units with faculty and registrars at their home institution prior to attending this field school.

**Transcripts**: An official copy of transcripts will be mailed to the permanent address listed by students on their online application. One more transcript may be sent to the student's home institution at no cost. Additional transcripts may be ordered at any time through the <u>National Student Clearinghouse</u>.

#### PREREQUISITES

No archaeological experience is required for this field school. In fact, we are expecting everyone to be 'new' to archaeology so we start the program from the basics.

Prior to commencing the field school, all participants receive a web link and password to a digital resource portal that provides information about the site and Australian archaeology. Resources include a 'Town Marie Field Booklet', which introduces the site and all the processes required before, during and after excavation. A series of digital lectures (to accompany the booklet) were also filmed in 2023. Additional reading material, including academic journal articles, digital archives and previous Everick field school reports are also made available.

#### **DISCLAIMER – PLEASE READ CAREFULLY**

Our primary concern is with education. Traveling and conducting field research involve risk. Students interested in participating in IFR programs must weigh whether the potential risk is worth the value of education provided. While risk is inherent in everything we do, we do not take risk lightly. The IFR engages in intensive review of each field school location and programming prior to approval. Once a program is accepted, the IFR reviews each program annually to make sure it still complies with all our standards and policies, including those pertaining to student safety.

The IFR does not provide trip or travel cancellation insurance. We strongly encourage students to explore such insurance on their own as it may be purchased at affordable prices. <u>Insuremytrip.com</u> or <u>Travelguard.com</u> are possible sites where field school participants may explore travel cancellation insurance quotes and policies. If you do purchase such insurance, make sure the policy covers the cost of both airfare and tuition.

We do our best to follow a schedule of activities, methods training, and programming as outlined in this syllabus. However, this schedule can be easily disrupted by any number of unforeseen circumstances, including revised decisions by local permitting agencies, political unrest, and changes in the weather. While this schedule represents the best of the director(s) intentions, we—students and staff alike—need to be adaptable and tolerant of necessary alterations. This adaptability is an intrinsic part of all field research.

If you have any medical concerns, please consult with your doctor. For all other concerns, please consult with the program director and staff.

#### COURSE OBJECTIVES

The objective of this field course is to provide students with an introduction to archaeological field methods and practical training in field techniques along five main themes:

- (1) site prediction,
- (2) research design,
- (3) field survey and excavation,
- (4) artefact analysis, and

(5) interpretation and reporting.

Through video modules, required and recommended readings and other learning resources, students will gain the background knowledge required for implementing an archaeological excavation. Practical experience will be gained through archaeological fieldwork on the historical township site of Town Marie, located outside of Ipswich, Queensland, Australia. The course is designed so that students have the skill and experience necessary to complete an archaeological site report relevant to Cultural Resource Management (USA) and Cultural Heritage Management (Australia) careers. Students will be able to produce a site report that includes background, methods, results, and historical significance assessment.

## LEARNING OUTCOMES

After successfully completing this course, students will be able to:

- Understand the basic concepts involved in designing an excavation strategy, including integration of historic aerials, ground penetrating radar (GPR), site survey, and previous mapping.
- Implement an archaeological testing strategy, including laying out a site grid, using a total station, and excavation principles.
- Excavate according to research design goals and industry standard, including artefact identification, hand digging, piece plotting artefacts, sediment sampling, and recording relevant information.
- Document site formation processes through stratigraphic analysis, feature drawing, section drawing, and overall site interpretations.
- Understand and apply the ethics of archaeological practice and make an assessment of site historical significance as it relates to preservation and management decision making.
- Use archaeological datasets, photographs, and stratigraphy to produce a complete site report.

The course is designed to align with a professional skills document available called the "Australian Archaeological Skills Passport" as well as the course textbook, "The Archaeologist's Field Handbook" (Burke, Morrison, and Smith, 2017). The field school will provide training in both Group A (excavation and survey) and Group B (field skills and technical equipment) skills, which aligns with the textbook background readings as follows:

Activity	Australian Archaeology Skills Passport	The Archaeologist's Field Handbook
SITE PREDICTION	Site safety	Desktop research, p. 29-36
Introductions and site safety	Desktop assessment	Literature review, p. 26-28
Literature review, inc. previous archaeological research	Geophysics and remote sensing	Working with the legislation, p. 8-14
Desktop study, inc. historic aerials, parish mapping, DSDS ATSIP (state register) search, historic register searches	Knowledge of legislation	Geophysics, p. 121-123
Engage with legislation	Global Navigation Satellite System (GPS)	Finding sites and site survey, p. 87-98
Ground Penetrating Radar (GPR) survey results	Map reading	Archaeological surveying, p. 175-
Site survey, site description, recording	Principles of field survey	Mud maps, p. 80-83
Mud map of site finds	Site formation processes	
	Site types and distribution	
RESEARCH DESIGN	Excavation Trench layout	Research designs, p. 24-26

Where to excavate?	Use of excavation hand tools	Work health and safety, p. 17-21
Principles of excavation		Principles of excavation, p. 241-243
Laying out the trenches		Laying out a site grid, p. 250
Excavation process		Recording the excavation process, p. 255-260
Excavation tools		Using a trowel and brush, p. 266-271
Sieving and sorting		Sieving and sorting, p. 273-276
EXCAVATION and SURVEY	Artefact recovery cataloguing and storage	Collecting samples in the field, p. 280-282
Sampling strategy	Sample collection	
Sieving, sorting, cataloguing	Site plans	Recording sections, p. 260- 263
Recording sections and drawing	Section drawings	Photographing excavations, p. 278-280
Photographing excavations	Photography	Principles of archaeological photography, p. 220-233
	Historic artefact identification	Recording artefacts, 293-336
Operate a total station	Total Station	
INTERPRETATION and REPORTING		
Final section drawings	Section drawings	
Take high resolution site photos	Photography	
Data checking		
Notification of Discovery to DES	Significance assessment	

## ASSESSMENT

Participation in field work, including survey, excavation, sieving, and recording are essential requirements for this course and compulsory for completion. Three assessment tasks will be assigned as follows:

20%: Active engagement with the daily tasks, including participating in field and laboratory work that are scheduled each day. This includes daily diary entries and a weekly review of recording sheets.

30%: Notification of Discovery form. Complete a Queensland government Notification of a Discovery form completely and accurately at the end of week 3.

50%: Excavation Report. Compile a complete report of the excavated unit (e.g., square, trench, or pit) the student worked on throughout the field school. Reports should demonstrate knowledge of the site background obtained through the required and recommended readings. Additional information should include rationale for methods used, basic analysis of recovered artefacts and their relationships, illustrations of the site and material culture, and critical engagement with site significance criteria.

#### **COURSE SCHEDULE**

All IFR field schools begin with a safety orientation. This orientation addresses local and program protocols concerning student behavior, appropriate attire, local practices and sensibilities that may be unfamiliar, potential fauna and flora hazards, IFR harassment and discrimination policies, and the student Code of Conduct.

Online resources are videos made available through the Everick data portal prior to the field school. They can be watched at any time but it is strongly encouraged to have completed the videos before the program begins.

Week 1		Readings
Day 1 (Sunday) 6:00pm – 8:00pm	Arrival Dinner, safety orientation, and code of conduct review	Handbook; Grubb 2018
Day 2 (Monday) 7:00am – 5:00pm	Pick up from designated location in Brisbane CBD Site introduction Desktop assessment (online) Legislation and stakeholder engagement (online) Survey	Textbook pgs 8-14, 26-36, 80-83, 87-98, 121-123, 175 Banivanua-Mar, 2007
Day 3 (Tuesday) 7:00am – 5:00pm	Map reading (online) Recording and mud maps (online) Total station overview Principles of excavation Begin excavating	Textbook (pgs 17-25, 241-243, 250, 255-260) Lyman 2004: 1-8
Day 4 (Wednesday) 7:00am – 5:00pm	Site prediction (online) Significance assessments (online) Excavating and Recording	Textbook (pgs 260-263, 278-280, 220-233, 293-336) Fillios and Blake 2015: 111-132
7:00am – 5:00pm		riy, 1975, biooks et al. 2009
Day 6 (Friday) 7:00am – 5:00pm	Excavation and Recording Week wrap-up discussion	
Day 7 – 8 (Saturday and Sunday)	Weekends are open for study and exploring Brisbane area	
Week 2 (Monday – Friday)	Total station data analysis QGIS overview (online)	Rapson et al. 2007
Week 3 (Monday – Friday)	Section Drawing Stratigraphy	McPherron 2005

Week 4 (Monday – Friday)	Artefact Analysis	Lyman 2004:223-234, 294;
	Photography	Fillios and Blake 2015: 133-140
	Report Writing	

#### TYPICAL WORKDAY

7:00am	Pick up in Brisbane CBD
8:00am	Arrive on site
10:30-11am	Morning Tea
12:30-1:15pm	Lunch
3:00-3:15pm	Afternoon Tea
4:15pm	Leave site
5pm	Arrive back in Brisbane CBD

#### **REQUIRED READINGS**

PDF files of all mandatory readings will be provided to enrolled students. Students are encouraged to download and/or print readings prior to traveling. Course participants are expected to be prepared to engage the discussions led by facilitators, all of whom will be looking for compelling evidence that students have read and thought about the assigned readings prior to the scheduled day on which they are first discussed.

**TEXTBOOK:** Burke, H., M. Morrison, and C. Smith. 2017. *The Archaeologist's Field Handbook* (2<sup>nd</sup> ed.). Allen & Unwin Press.

**HANDBOOK:** Everick Foundation Pty Ltd, 2024. Archaeological Field School Participant Workbook. Unpublished. Available from Everick data portal link provided to students.

Alfredson, G. 2006 Report on an Historical Archaeological Study pf Bremer Business Park, Bundamba. Unpublished report prepared for Wyngate Properties Pty Ltd.

Banivanua-Mar, T. 2007. Introduction. In, *Violence and colonial dialogue: the Australian-Pacific Indentured Labor Trade*. University of Hawai'l Press, p. 1-19.

Brooks, A., H. Bader, S. Lawrence & J. Lennon. 2009 Ploughzone Archaeology on an Australian Historic Site: A Case Study from South Gippsland, Victoria. *Australian Archaeology* 68:1, 37-44.

Fillios, M. and N. Blake. 2015 Animal bones in Australian archaeology a field guide to common native and introduced species (2<sup>nd</sup> edition). Sydney University Press: Sydney.

Fry, K.L. 1973. Boiling down in the 1840s: a grimy means to a solvent end. *Labour History* 25:1-18.

Grubb, K. 2018. Town Marie, the pioneer settlement at Karalee near Ipswich. Online resource: <u>https://www.townmarie.com/</u> (last accessed 10 October 2023).

Hayes, L 2002. The Tangible Link: Historical archaeology and the cultural heritage of Australian South Sea Islanders. *Australian Archaeology 20: 77-82.* 

Lyman, R. L. 2004. Vertebrate Taphonomy (digital reprint). Cambridge University Press: Cambridge.

McPherron, S.J.P. 2005 Artifact orientations and site formation processes from total station proveniences. *Journal of Archaeological Science* 32:1003–1014.

Rapson, D. J., Hill, M. G., & Beran, G. W. 2007. Archaeology of an Early 20th Century Carcass Disposal Pit, Division of Veterinary Medicine, Iowa State College. *Plains Anthropologist* 52(204), 373–417.

Robins, R 2014 Report on Archaeological Investigations of the Bremer Mills Estate Boiling Down Works. Unpublished report prepared by Everick Heritage Consultants for Amex Corporation.

## **RECOMMENDED READINGS**

Bernatchez, Jocelyn A, and Curtis W Marean. 2011. Total Station Archaeology and the Use of Digital Photography. SAA Archaeological Record May:16–21.

James Ivory Diary 1871-1880. 12 Feburary 1877, Picture Ipswich, Ipswich Libraries, last modified 2013, <u>https://www.pictureipswich.com.au/nodes/view/8531</u>

Fairbairn, A. 2005. Simple Bucket Flotation and Wet-Sieving in the Wet Tropics. PalaeoWorks Technical Report 4. Canberra, ANU.

Ipswich City Council 2017. South Sea Islanders in Ipswich.

https://www.ipswich.qld.gov.au/live/our-community/multicultural/assi#:~:text=A%20number%20of%20 Australian%20South.the%20Bundamba%20Creek%20(1867).

## **TRAVEL & SAFETY LOGISTICS**

### NOTICE OF INHERENT RISK

Traveling and conducting field research can involve risk. The IFR engages in intensive review of each field school location and programming prior to approval. Once a program is accepted, the IFR reviews each program annually to make sure it still complies with all our standards and policies, including those pertaining to student safety. Participants should also take every reasonable step to reduce risk while on IFR programs, including following the safety advice and guidelines of your program director, being alert to your surroundings and conditions, letting someone know where you will be at all times, and assessing your personal security.

The IFR does not provide trip or travel cancellation insurance. We strongly encourage participants to consider purchasing this insurance, as unexpected events may prevent your participation or cause the program to be canceled. Insurance is a relatively small cost to protect your educational investment in an IFR program. When comparing trip cancellation insurance policies, make sure the policy covers the cost of both airfare and tuition.

We do our best to follow a schedule of activities, methods training, and programming as outlined in this syllabus. However, this schedule can be easily disrupted by unforeseen circumstances, including weather, revisions by local permitting agencies, or conditions onsite. While this schedule represents the intentions of the program, adaptability is an intrinsic part of all field research, and necessary alterations to the schedule may happen at any time.

If you have any medical concerns, please consult with your doctor. For all other concerns, please consult with the program director and staff.

## **PROGRAM SPECIFIC FIELD CONDITIONS**

The remains of Town Marie are now located within a private cattle grazing property that includes horses, cattle, and occasional farm dogs. Our current excavation area is at the back of the property, meaning we must make a short (approx. 5-10 mins) daily walk to site, including traversing up and down some moderate slopes and navigating a short creek crossing via a bridge. The site is situated on a ridge line overlooking the Bremer River in one direction and surveying the rest of the property in the other. The excavation season takes place during the Australian winter, meaning the mornings can get quite chilly  $(0^{\circ}-10^{\circ}C / 30-50^{\circ}F)$  but we warm up under the glorious Queensland sun and temperatures can increase to approx. 25°C / 70°F).

Archaeological excavations include physical activity, such as walking over varied terrain, walking up and down steps, kneeling, lifting buckets, and sitting on the ground. Artefact sieving and processing can be done while seated. We will do our best to accommodate all levels of fitness and mobility. All activities will occur outdoors, subject to winter or spring weather, and shade is provided. If rain occurs, we will head indoors for artefact analysis or other relevant activities. If you have any concerns about the activity level, please discuss with the program director or IFR prior to committing to the program.

### **STUDENT HEALTH**

An IFR field school is designed to provide safe, positive, and constructive experiences for participating communities, students, and researchers. We are committed to protocols and practices that support the

health and well-being of all involved in our field school projects, including the members of the community in which these projects take place.

We recommend that students adopt best-practices for arriving in a good state of health to protect themselves and their peers' readiness to set about the work of the field school. A thriving field camp environment is a constant exchange of energy, patience, effort, respect, and service. Arriving healthy is every student's first act of service — their first opportunity to behave in a way that respects the safety and wellness of one another.

IFR programs follow the health requirements and guidelines of local health authorities. You may also wish to consult recommendations from the US Centers for Disease Control at: https://wwwnc.cdc.gov/travel/destinations/list

COVID 19 information for Queensland: https://www.qld.gov.au/health/conditions/health-alerts/coronavirus-covid-19

#### **VISA REQUIREMENTS**

According to <u>US Department of State</u>, US citizens are requires to have a valid passport and <u>Electronic</u> <u>travel Authority (ETA)</u> to enter Australia (for short term travel).

An ETA allows you to enter and stay in Australia for up to 3 months. The ETA allows you to study or train for up to 3 months.

You must apply for your ETA via the ETA App. Please follow the steps outlined <u>here.</u> You will receive your ETA within 24 hrs of applying.

Citizens of other countries are asked to check the embassy website page at their home country for specific visa requirements.

## TRAVEL (TO AND DURING THE PROGRAM)

Natural disasters, political changes, weather conditions and various other factors may force the cancellation or alteration of a field school. IFR recommends students only purchase airline tickets that are fully refundable and consider travel insurance in case a program or travel plans must change for any reason. General information for this program is below, but keep in mind we will discuss any updated travel information and regulations during the required program orientation, which could affect travel plans.

International students travelling to the field school will arrive in one of the major Australian cities, usually Brisbane (BNE), Sydney (SYD), or Melbourne (MEL). Australia has a unique and sensitive flora and fauna. You will go through customs and a strict biosecurity screening in whichever airport is your first point of entry into Australia. Make sure you read through the guidelines on the Australian agriculture website (www.agriculture.gov.au/biosecurity-trade/travelling/to-australia#before-you-travel). Border security takes false declarations very seriously, so don't attempt to bring any food or animal products in with you. You may need to take a domestic flight to arrive at the Brisbane airport. Once you arrive at Brisbane airport please catch the train to Roma Street Station and walk approx. 5-10 minutes to your

accommodation. Please search and use 'Translink' (Queensland public transport journey planner) to arrange your trip from the airport to your accommodation.

If you missed your connection or your flight is delayed, please call, text or email the field school director immediately. A local emergency mobile phone number will be provided to all enrolled students.

An Everick staff member will pick participants up at a pick up point near their accommodation and drive them to the site every day and drop them back again in the afternoon. The trip is about 30 minutes in the morning but can extend to 45 minutes in the afternoon. You will be provided with information about the field school drop off and pick up point (approx. 5 minute walk from accommodation location).

## ACCOMMODATIONS

All students will be staying in serviced hotel apartments in downtown Brisbane. Sleeping spaces will fit two single beds (2 students) per room. Apartments will have 2-3 sleeping spaces; therefore 4-6 students will be in each apartment. The apartment has a kitchen and students will be able to cook meals as needed within the apartment. Morning tea and lunch will be provided on the weekdays at the field school, so students must arrange their own weekday breakfasts and dinners, in addition to weekend lunches. Downtown Brisbane also has several dining/take away options. Each apartment has laundry facilities (washing machine and dryer), so students can wash as required. Each apartment also has at least one bathroom (shower, sink and toilet). The apartment will be serviced weekly by hotel staff.

Students will be able to arrange their own weekday breakfasts and dinners, in addition to weekend lunches. Therefore, they can ensure their dietary requirements and/or allergies are catered to. There are numerous grocery stores within easy walking distance from student accommodations, including Woolworth's, Coles, and Aldi. Each apartment will have a dishwasher so kitchen cutlery and utensils can be sufficiently cleaned. Students must inform Everick of any dietary requirements or allergies so we can ensure snacks and lunch items at the field school are suitable for all participants. Lunch sandwiches, wraps or sliders are usually purchased from Costco each day and we can accommodate individual needs.

#### EQUIPMENT LIST

<u>REQUIRED</u>

- Broad brimmed hat with chin strap (to be worn each day at site)
- Long sleeved shirts (to be worn each day at site). Dressing in layers is advised as the mornings are cool and the afternoons can be hot
- Trousers/long pants (to be worn each day at site)
- A daypack or rucksack to carry personal equipment needed on site
- Enclosed shoes (to be worn each day at site)
- A rain jacket or windbreaker (in case of brief showers, we won't be outdoors if weather is too bad)
- Sunglasses with UV protection (to be worn each day at site).
- Water bottle (water will be available on site but you must bring a bottle to bring with you to site)

#### <u>RECOMMENDED</u>

- Pen and/or pencil and notepad for notetaking
- Reusable cup for beverages
- A USB flash drive for transferring files and report writing
- A laptop computer or tablet with wireless capabilities that can run Microsoft Office (or an open-source equivalent) and Q-GIS software