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MEMORANDUM

ATTENTION: Senate

TEL

FROM: Peter Keller, Vice-President, Academic and Provost, and Chair, SCUP

A handwritten signature in black ink, appearing to read "Peter Keller".

RE: Full Program Proposal for the Master of Arts in Heritage Resource Management (SCUP 18-26)

DATE: October 17, 2018

TIME

At its October 10, 2018 meeting, SCUP reviewed and approved the full program proposal for the Master of Arts in Heritage Resource Management within the Faculty of Environment, effective Fall 2019.

Motion:

That Senate approve and recommend to the Board of Governors the full program proposal for the Master of Arts in Heritage Resource Management within the Faculty of Environment, effective Fall 2019.

c: J. Driver

OFFICE OF THE DEAN

To: Dr. Jeff Derksen, Dean of Graduate Studies / Chair of SGSC

From: Dr. Dongya Yang, Associate Dean / Chair, Faculty of Environment Graduate Studies Committee

cc: Dr. John Welch, Director, HRM Professional Graduate Program
Dr. Jon Driver, Graduate Chair of Archaeology

Date: Sept. 4, 2018

Re: Full Program Proposal for the Heritage Resources Management (HRM) Master's Program

Full Program Proposal for the Heritage Resources Management (HRM) Graduate Certificate Program

The Faculty of Environment Graduate Studies Committee has approved the full program proposal for the Heritage Resources Management (HRM) Master's program and the full program proposal for the Heritage Resources Management (HRM) graduate certificate program from the Department of Archaeology. Please add them onto the agenda of the upcoming SGSC meeting.

Feel free to contact should you have any questions or concerns.



Dongya Yang, Ph.D.
Associate Dean, Research and Graduate Studies
Professor of Bioarchaeology

 SFUDEPARTMENT OF
ARCHAEOLOGYPROFESSIONAL GRADUATE
PROGRAM IN HERITAGE
RESOURCE MANAGEMENT

TO: Prof. Dongya Yang, Associate Dean, Faculty of Environment

FROM: JR Welch, Director, HRM Professional Graduate Program 

SUBJECT: Full Program Proposal for the HRM Masters

DATE: 22 August 2018

On behalf of the Department of Archaeology I am pleased to submit the full program proposal (FPP) for the Masters in Heritage Resource Management for review and comment or approval by the FENV Graduate Committee.

The Archaeology Department Faculty intends to commence delivery of the Professional Graduate Program in Heritage Resource Management pursuant to the attached FPP, the FPP for the HRM Graduate Certificate, and the attached budget in Fall 2019.

I am on study leave for Fall 2018, but have agreed to remain the principal point of contact for the FPP review process. Contact me via welch@sfu.ca or my mobile (520-991-1739) with any questions or concerns. If I am not available to respond effectively or to participate personally, the Archaeology Graduate Chair, Prof. Driver, will do so.

SFU Archaeology's Professional Graduate Program in Heritage Resource Management trains HRM leaders to integrate ethical, legal, business, and research priorities in pursuit of desired futures for treasured pasts.



SIMON FRASER UNIVERSITY
ENGAGING THE WORLD

Master of Arts in Heritage Resource Management

Full Program Proposal

August 23, 2018
Department of Archaeology

PART A: Information required by the Ministry of Advanced Education

EXECUTIVE SUMMARY

Overview of the SFU's history, mission, and academic goals

As Canada's engaged university, Simon Fraser University is defined by its dynamic integration of innovative education, cutting-edge research and far-reaching community engagement. SFU was founded in 1965 with a mission to bring an interdisciplinary approach to learning, embrace bold initiatives, and engage with communities near and far. SFU is consistently ranked amongst Canada's top comprehensive universities and is one of the world's leading teaching and research institutions.

The Master of Arts in Heritage Resource Management in Simon Fraser University's Department of Archaeology takes a global perspective on consequential issues related to material heritage. Most national governments have developed legislation and regulatory policy protecting heritage, defining what is to be preserved, and what forsaken, in the course of community and economic development. These questions and related matters of public policy, business, research, and professional practice, drive the dynamic field of heritage resource management¹, which today employs at least 90 percent of all archaeologists in North America. SFU Archaeology has been offering the professional graduate program in Heritage Resource Management as a cohort special arrangements program since Fall 2016. HRM program graduates are prepared to lead government, community, and industry decision making regarding the disposition of cultural heritage imperiled by land alteration and resource extraction.

Proposed credential to be awarded

Master of Arts in Heritage Resource Management

Location of program

Department of Archaeology, SFU Burnaby Campus (and via online instruction)

Academic unit(s) offering proposed program

Faculty of Environment

Anticipated program start date

Fall 2019

¹ Heritage Resource Management, Cultural Resource Management, Cultural Heritage Management, and Archaeological Resource Management are often used interchangeably, albeit the first two incorporate allied fields of architecture, museum studies, object conservation, and heritage tourism. The proposed program responds to personnel demands from an industry with a largely archaeological focus. We title this program Heritage Resource Management, however, for its inclusive values, especially respect for descendant communities whose pasts are often disproportionately researched and impacted.

Anticipated completion time

The program is designed for completion in six terms (two years).

Summary of proposed program

a) Aims, goals and/or objectives of the proposed program

The Master of Arts in Heritage Resource Management (HRM-MA) exists to provide practice-proven, Bachelor's-level HRM practitioners with opportunities to obtain the knowledge, skills, perspectives, and research-focused graduate degrees they need to advance both their individual careers and HRM policies, practices, and enterprises. The HRM program, which couples state-of-the-art online coursework with a traditional, thesis-based M.A., is designed to meet strategic objectives at societal, institutional, departmental, and disciplinary scales. On the societal level—in Canada and around the world—HRM leaders trained to work at the interface of government, industry, community, and research are needed to support good decisions regarding the disposition of cultural heritage imperiled by land alteration, resource extraction, and climate change. As Canada's engaged university, and as host for one of Canada's top archaeological programs, SFU is positioned to mobilize existing assets to meet demands from the HRM industry for highly qualified personnel. SFU and its HRM program faculty and graduates are also prepared to embrace invitations from Indigenous and other local communities for better and more broadly informed cultural heritage research and conservation.

b) Anticipated contribution of the proposed program to the mandate and strategic plan of the institution

The HRM program assists in the realization of the SFU Strategic Vision, and the Faculty of Environment Academic Plan (June 2018 draft) by engaging communities of students, researchers, regulators, industry representatives, and local heritage stewards. The first two cohorts (11 students in both 2016 and 2017) have been integral in expanding the program's community, industry, and government networks, and in creating a rich and collegial learning environment. In accord with the SFU Aboriginal Strategic Plan (2013–2018), the HRM program's structure, content, and personnel are dedicated to creating modes of HRM practice that are informed by Indigenous values and preferences, and are dedicated to serving Indigenous peoples' interests in learning from, making appropriate use of, and perpetuating cultural heritage places, objects, and traditions.

SFU Archaeology identifies "First Nations Heritage and Resource Management" as one of three areas of "concentrated expertise." The department has dedicated the last two decades to crafting partnerships, training students, and customizing research to engage with the communities whose ancestors most archaeologists study. The HRM program builds on and extends this success by embracing community values centered on respect, by actively recruiting Indigenous and international students, and by featuring professional ethics and community collaboration issues in the required coursework.

c) Linkages between the educational goals and the curriculum.

The HRM program curriculum features a three-day on-campus orientation, four required courses—each focused on one of the four essential dimensions of the HRM field—and a traditional master’s thesis involving a data-driven analysis of a HRM problem. The efficient program design facilitates achievement of the HRM program’s twin educational goals: (1) Improve HRM practitioner knowledge and skill in HRM law and policy, practice and ethics, business management, and research design and methods; and (2) Prepare HRM leaders who deploy critical and strategic thinking to integrate broadly beneficial research, compliance, commerce, and community development outcomes.

HRM program graduates are expected to be able to do all six of the following:

1. **Identify and analyse** how personal, collective, governmental, and institutional values and interests are linked to heritage and how these values and interests influence management processes and outcomes.
2. **Recognize, describe, and practice heritage resource management** as an international, interdisciplinary profession that draws strengths and creates synergies from the integrated application of biophysical science, social science, and humanities to heritage and heritage management.
3. **Compare and apply** international, Canadian, and United States systems for heritage regulation, identification, categorization, evaluation, and treatment.
4. **Identify and engage with** individuals and groups with interests tied to particular heritage in discussions regarding the values, threats, management priorities, and investigative and interpretive opportunities presented by that heritage and its status.
5. **Plan, prepare, and deliver** the results of HRM research.
6. **Identify and put to work** reliable knowledge, skills, and expertise relating to heritage resource management law and policy, ethics and practice, business and management, and research planning and methods.

Student success in reaching these outcomes is supported by four courses designed specifically for the HRM program (not repurposed from existing graduate-level courses in archaeology or other disciplines). The courses are taught by individuals with experience in HRM in the private, public, not-for-profit and Indigenous sectors. In addition, students are encouraged to incorporate their working experiences into regular coursework assignments and weekly interactive discussions. Students thus contribute to, and benefit from, the shared professional experiences of the cohort and the instructors. Most of the in-progress theses are building upon a research project undertaken as part of the candidate’s professional lives, thus allowing the student to mobilize existing knowledge and networks in addressing a problem of consequence at the interface of research, practice, policy, and/or business dimensions of the HRM field.

d) Potential areas/sectors of employment for graduates and/or opportunities for further study.

See National Occupational Classification (NOC) codes 0511, 5112, and, especially, 4169. HRM-MA graduates, all of whom are already working professionals, expand the

geographical and managerial boundaries of their employability in archaeology, environmental resource management, construction and compliance support services, museums, and government regulatory and planning offices at regional, provincial, and federal levels. Graduates of this program are eligible and prepared for entry into a doctoral program.

e) Delivery methods

With three exceptions, the HRM program is delivered asynchronously online. Each of the four required courses has been designed and delivered using the Canvas learning management system and in close collaboration with the director and staff of the SFU Centre for Online and Distance Education. The exceptions are the on-campus orientation during the first week of fall term classes, the ‘virtual meetings’ held each week during the teaching terms, and the formal thesis defences required for each master’s candidate.

f) Program strengths

The HRM-MA is unique. To our knowledge, it is the only master’s program that integrates online coursework with traditional master’s thesis requirements tailored to enable career advancement for junior HRM practitioners. More broadly, the program is purpose-built by and for HRM professionals from Canada and the United States. The three-day on-campus orientation sets the tone and pace for high-quality collegial communications within the cohort and among faculty, candidates, and industry, community, and government partners. The coursework focus on Canada and the United States facilitates cross-border comparisons, professional integration, and opportunities for international practice. The theses are defined and guided by the SFU faculty supervisor and an HRM colleague to meet the standards of the Register of Professional Archaeologists (RPA) and other permit and licensure mandates. Finally, the program’s state-of-the-art online learning environments are supported by dedicated specialists and customized learning tools, including a program-specific glossary and the use of Blackboard Collaborate to engage industry specialists in coursework and thesis research.

g) An overview of the level of support and recognition from other post-secondary institutions, and relevant regulatory or professional bodies, where applicable and plans for admissions and transfer within the British Columbia post-secondary education system.

Since 2014 and the initiation of planning for an online professional program to complement SFU Archaeology’s traditional graduate programs, consultations have occurred with over 100 individuals and representatives of government, academic, industry, Indigenous, and student groups. Formally scheduled meetings to explain the HRM-MA program purpose and design and to solicit feedback have been held with the BC Archaeology Branch, the Archaeological Survey of Alberta, the BC Association of Professional Archaeologists, Golder Associates, and Arizona State Museum (University of Arizona). Appendix 3 includes various statements from individuals (not affiliated with

SFU) who participated in these consultations and possess knowledge of the HRM program and represent institutional interests in excellent training for future generations of HRM practitioners.

HRM program design and implementation plans have been presented to audiences of practicing and academic archaeologists at the BC Archaeology Forum (2015 & 2016), Society for American Archaeology Meeting (2015), and the Chacmool Conference (2015, 2017). These presentations are summarized and refined in a peer-reviewed article authored by the HRM program designers, course instructors, distance education consultant, and curriculum consultant: Welch, J.R.; Burley, D.V.; Driver, J.C.; Hogg, E.A.; Jayasundera, K.; Klassen, M.; Maxwell, D.; Nicholas, G.P.; Pivnick, J.; and Dore, C.D. (2018) Digital Bridges Across Disciplinary, Practical and Pedagogical Divides: An Online Professional Master's Program in Heritage Resource Management. *Journal of Archaeology and Education* 2. <https://digitalcommons.library.umaine.edu/jae/vol2/iss2/1>

Students within the British Columbia post-secondary education system are certainly admissible and able to transfer into the program, though it bears mention that each of the HRM program's four required courses is unique.

Program graduates are eligible for acceptance into graduate or professional school programs at other institutions. Although the program is designed for professional archaeologists, the requirement for a full thesis (rather than a project or an examination) means that graduates of this program will be eligible to enter a doctoral program in the future. The HRM program thesis requirement further assures the eligibility of graduates for registration with the Register of Professional Archaeologists (RPA). The program also satisfies all academic and formal training for licensure and permitting mandates wherever these exist in Canada and the United States.

h) Related programs in the institution or other British Columbia post-secondary institutions.

There are no similar programs on offer in British Columbia.

Contact information

Professor John R. Welch, HRM Program Director, 778-782-6726, welch@sfu.ca

PART B: Information required by Simon Fraser University

PROGRAM DETAILS

a) Graduation requirements, target audience

The target audience for the Master of Arts in Heritage Resource Management (HRM-MA) is junior level HRM practitioners, especially Bachelor's-level archaeological crew chiefs and project managers who have made career commitments to HRM and require additional credentials to optimize their potential for advancement in the field. The HRM program prepares practicing HRM professionals who lack research credentials to integrate ethical, legal, business, and research priorities in pursuit of desired futures for treasured legacies from diverse pasts.

Program requirements conform to GGR 1.7 in the Graduate General Regulations: <http://www.sfu.ca/students/calendar/fees-and-regulations/grad-regulation.html>. The HRM program consists of a cohort orientation on the Burnaby campus, course requirements and a thesis, for a minimum of 38 units. Students who have completed the HRM graduate certificate will receive 10 units of advance credit for course work already completed. These students are required to complete 10 additional units of graduate course work and a thesis for a minimum of 38 units. The additional units will include ARCH 591, or comparable course work, as approved by the HRM director.

All students complete each of the following:

ARCH 531 - HRM Law and Policy (5):

This course features weekly online content, weekly readings, and three instructor-evaluated weekly assignments—a reading comprehension quiz, a peer discussion, and a writing exercise.

ARCH 541 - HRM Professional Practice and Ethics (5):

This course features weekly readings, weekly blogging and peer-commentary assignments, and instructor-evaluated weekly written commentaries, as well as a multi-media response to a 'grand challenge' in the field of HRM.

ARCH 551 - HRM Business Management (5):

This course requires students to understand and solve weekly problem sets in business management grounded in HRM case studies. The final assignment requires students to gather and analyse data as the basis for a formal proposal for a management innovation in an operating HRM business.

ARCH 561 - HRM Archaeological Research Design and Methods (5)

Online lectures built around the challenges and opportunities presented by field research and laboratory and data analyses inspire students to examine and refine their full thesis proposals for presentation to their thesis supervisors.

ARCH 898 – MA Thesis (18)

Following coursework completion, students advance to candidacy and must complete a written thesis followed by a formal public defence adhering to policies and procedures of SFU Graduate regulations for Master's thesis. Candidates are encouraged to choose a thesis topic that is of particular interest to them or that relates to their recent or envisioned professional practice.

No internship or practicum is required. All of the current candidates integrate their prior professional experience into their coursework and most use their thesis research to define and prepare for career advancement following the completion of graduate studies.

b) Admission requirements

Admission requirements must conform to GGR 1.3 in the Graduate General Regulations: <http://www.sfu.ca/students/calendar/fees-and-regulations/grad-regulation.html>. All applications that meet or exceed the following two requirements will be considered:

1. A Bachelor's degree in anthropology, archaeology, museum studies, planning, or a related field; and
2. Professional experience working in heritage resource management or a related field, including at least some experience in lab work, field work, planning and consultation, and project and budget management. 1-2 years of professional employment are recommended.

c) Evidence of student interest and labour market demand

The HRM program has, in three years, attracted more than 30 applications and has registered 22 students. A master's degree (with thesis) is the minimum requirement in many provincial (Canada) and state (USA) regulations for supervision of heritage projects involving archaeological excavation. It is also a minimum requirement for registration as a professional archaeologist (Register of Professional Archaeologists [RPA]), the emerging professional qualifications standard in the United States and internationally. The RPA standards include the following:

- “The applicant must have an advanced degree (such as an M.A., M.S., Ph.D., or D.Sc.) from an accredited institution in archaeology, anthropology, art history, classics, history, or other germane discipline with a specialization in archaeology.” [Simon Fraser University is the only research-intensive Canadian university that is accredited in the USA]
- “As part of that advanced degree, the applicant must have designed and executed an archaeological study and have reported on that research in the form of a Master's thesis and/or Ph.D. dissertation. The thesis or dissertation must show a substantive data analysis by the applicant directed toward an explicit archeological research problem.” [The proposed MA in HRM requires a thesis]

Students take advantage of the opportunities embedded in the HRM program orientation, coursework, and thesis requirements to expand their professional networks, refine their understanding of HRM's politico-legal contexts, ethical parameters, practical discretion, business management tools and principles, and research mandates. Program graduates will be situated to pursue unlimited upward mobility within their current jobs as consulting archaeologists and staff members for government museums and regulatory agencies, as well as to make lateral moves across HRM sectors in pursuit of emergent advancement opportunities in understaffed (by HRM) geographical areas (especially

Africa and Asia) and organizational types (especially non-profits and Indigenous governmental and nongovernmental entities).

d) Eligibility for scholarships, awards, and financial aid

Students in professional graduate programs are not eligible for Canada Student Loans/Grants, SFU bursaries through SFU Financial Aid, or awards funded from the university's operating budget (e.g., entrance scholarships, graduate fellowships). HRM-MA candidates are eligible and encouraged to apply for funding through SFU Teaching Assistantships, SFU Endowed/Private Awards, Tricouncil Master's Scholarships, and Mitacs Accelerate Research Internships. Between 2019 and 2022, and contingent on final funding approval, several Mitacs Accelerate research internships will be available to HRM-MA candidates. The Mitacs interns will receive up to \$15,000 in stipend and research funding to work with Nlaka'pamux Nation Tribal Council and Teck Highland Valley Copper Operations representatives.

e) Program evaluation and academic/administrative oversight

All SFU academic programs are reviewed on a seven-year cycle. SFU is reviewed annually through the province of British Columbia's accountability report and will be reviewed regularly through the province's quality assurance process. SFU is fully accredited with the Northwest Commission on Colleges and Universities (USA), which requires regular reviews of all aspects of institutional performance on a seven-year cycle.

f) Main competitors outside BC

The HRM is, for the reasons stated above, unique and effectively peerless on a global scale. The only clearly comparable program in Canada, the Master of Arts, Applied Archaeology at the University of Western Ontario, includes a four-term residential requirement and a single course, Principles of Applied Archaeology, specifically designed for HRM practitioners. That program, and the approximately 20 comparable programs based at universities in the United States, either include three or more terms of on-campus intensive coursework or neglect the requirement for a written, formally examined thesis (online programs) or both. Only SFU Archaeology's HRM program has been custom-designed and effectively implemented to serve the needs of working HRM professionals around the world who are willing and able to excel in online coursework and in the preparation of a master's thesis on a problem in the broad field of HRM.

RESOURCES

a) Enrolment Plan

The best data available to support enrolment projections are statistics from the program's initial years as a cohort special arrangements offering. The Master of Arts in Heritage Resource Management (HRM-MA) has succeeded as a professional graduate program through an initial two years, attracting more than 30 applications and enrolling 22

students. Of these 22, 20 have advanced to candidacy; 1 has completed all MA program requirements and graduated; 1 has completed all coursework requirements and opted for the HRM Graduate Certificate; and one has suspended pursuit of the MA (maternity).

Although the quantity and quality of student applications to join the 2018 cohort have not been sufficient to run the coursework for the 2018–19 academic year, five of the 2018 applicants have agreed transfer their applications for consideration in 2019. A three-year communications plan is in place to use student and faculty blogs, social media, Google Ads, person-to-person recruitment, podcasts, and other tools to boost the quality and quantity of applicants in future years.

b) Resources required and/or available to implement the program (financial and personnel) including any new faculty appointments

Simon Fraser University is a well-established institution with excellent library and IT support. SFU also has a long history of providing distance education, and the well-staffed Centre for Online and Distance Education has proved an able and dedicated partner in the development of the HRM program’s unique online teaching and learning environments. SFU’s Teaching and Learning Centre has also supported the HRM program director and instructors in the innovation of context-appropriate HRM pedagogy and evidence-based research. No additional Library nor IT resources are required to run the proposed program. The Department of Archaeology has 19 faculty members. Most have already taken on supervision of HRM student theses and are willing to continue to do so. If necessary, HRM students will have ready access to department equipment, research collections, and laboratory space. Although no new faculty or other resources are required to implement the HRM-MA, SFU Archaeology has recognized the importance of the HRM field to both undergraduate and graduate programs and has identified an HRM archaeologist as a top hiring priority in the Faculty Renewal Plan. Resources generated from the program will support the hiring of part-time staff. Should the program grow we anticipate being able to hire a professor of professional practice.

There is no specific plan for the HRM program to affect the Archaeology Department’s “traditional” MA program. The HRM program serves a different set of potential students who are seeking advanced education relevant to their profession. This represents a response by the department to the changing needs of archaeologists in North America.

The only long-term impact on faculty resources is the commitment to provide the program director with a one course release from teaching.

Faculty members’ teaching/supervision

A large majority of the Department of Archaeology’s 19 faculty members are actively engaged in supporting the HRM program through teaching, planning-advising, and thesis supervising:

Faculty, Title	Specialty	Roles	Workload
F. Berna, Assistant Professor	Geoarchaeology	Thesis supervision	~5% (1 candidate in progress)
D. Burly, Professor	Pacific archaeology, Cultural Res. Mgmt.	Steering committee, Thesis supervision	~10% (2 candidates in progress)
H. Cardoso, Associate Professor	Human Osteology	Thesis supervision	~5% (1 candidate in progress)
M. Collard, Professor	Evolutionary archaeology	Thesis supervision	~5% (1 candidate in progress)
C. D'Andrea, Professor	Archaeobotany	Thesis supervision	< ~5% (no current students)
C. Dore, Adjunct Professor	HRM Business Management	Instructor for ARCH 551	~10 % (no thesis supervision)
J. Driver, Professor	Zooarchaeology	Steering committee, Thesis supervision	~10% (2 candidates in progress)
R. Jamieson, Associate Professor	Historical archaeology	Thesis supervision	~10% (2 candidates in progress)
D. Maxwell, Senior Lecturer	Zooarchaeology	Instructor for ARCH 561	~10% (no thesis supervision)
G. Nicholas, Professor	Indigenous & wetlands archaeology	Instructor for ARCH 541, Thesis supervision	~20% (3 candidates in progress)
R. Reimer, Associate Professor	Public archaeology and lithic sourcing	Thesis supervision	~10% (2 candidates in progress)
D. Sandgathe, Senior Lecturer	Palaeolithic archaeology	Thesis supervision	~5% (1 candidate in progress)
J. Welch, Professor and Program Director	Heritage Resource Management	Program direction, Thesis supervision, Instructor for ARCH 531	~45% (5 candidates in progress)

With the exception of Dr. Dore, who is adjunct and is compensated for his contributions to the HRM program on an annual contractual basis, the substantial investments required to create and deliver the HRM program through its first two full years have required faculty with requisite specializations to contribute in ways that exceed normal teaching-service workloads. Once the program moves out of the “Special Arrangements” format the workload will become part of the assigned teaching for faculty members.

Faculty involvement in the HRM program is otherwise having no appreciable effect on SFU faculty responsibilities in other programs. Appendix 5 provides the abbreviated CVs for the four faculty members currently serving as course instructors.

c) Proposed tuition and other program fees including a justification

Tuition will continue to be charged on a program basis, term-by-term. Tuition for 2019/2020 entry in the HRM master’s is \$4598 CAD per term, for six consecutive terms (\$27,588 CAD total tuition). Subject to approval by SFU's Board of Governors, the tuition is programmed to undergo a 2% annual increase. (Note that under the “Cohort

Special Arrangements” program the tuition is spread over 5 semesters. Our experience indicates that students need longer to complete the program, so we propose spreading the total tuition fee over six semesters, resulting in a per-semester fee that is less than the fee charged to students in the special arrangements program.

The revenues generated from the program in excess of the costs of HRM program administration and implementation will be used in support of Department of Archaeology research and teaching infrastructures.

PART C: Appendices

Appendix 1 Calendar entry

See attached revised SFU Calendar entry, submitted for approval in June 2018.

Appendix 2 New courses

Not applicable. The four required courses have received prior approval.

Appendix 3 Letters of support

See attached statements from non-SFU commentators, each and all of which support the institutionalization of the HRM program. The letters in Appendix 3 include statements from Society for American Archaeology President Susan Chandler, PhD; Register of Professional Archaeologists President Christopher Dore, PhD; Alberta Archaeological Survey Manager Darryl Bereziuk; University of Maryland curriculum consultant Carol Ellick; and Golder Associates Principal Andrew Mason; American Cultural Resources Association President Kim Redman; Stó:lō Research and Resource Management Centre Director David Schaepe; and University of California Berkeley Assistant Professor William White. Statements have been invited from the BC Association of Professional Consulting Archaeologists President and from the BC Provincial Archaeology Branch Manager Paula Thorogood.

Appendix 4 Details of program steering committee (if applicable)

John R. Welch, Professor of Archaeology and HRM Program Director

David V. Burley, Professor of Archaeology

Jonathan Driver, Professor of Archaeology

Appendix 5 Abbreviated curriculum vitae for faculty

See attached abbreviated standardized CVs from each of the four course instructors (Welch, Nicholas, Dore, Maxwell), summarizing their positions, credentials, research interests, and recent publications, grants and graduate supervision.

REVISED
CALENDAR ENTRY

Heritage Resource Management

MASTER OF ARTS

Description of Program

The master's in heritage resource management (HRM) is a professional graduate program that prepares HRM archaeologists to integrate ethical, legal, business, and research priorities in pursuit of desired futures for treasured legacies from diverse pasts. In addition to the thesis, the program consists of an orientation on the Burnaby campus and four online courses that provide intensive preparation in the essential dimensions of HRM archaeology:

- law and policy
- ethics and practice
- business management
- and research design and methods

For further information, visit <http://www.sfu.ca/archaeology/hrm.html>

Admission Requirements

Applicants must satisfy the University admission requirements as stated in [Graduate General Regulations 1.3](#) in the SFU Calendar. Applications to the program will be accepted from candidates who:

- Hold a bachelor's degree (or equivalent) in anthropology, archaeology, museum studies, planning, or a related field;
- Obtained a cumulative undergraduate GPA of at least 3.0;
- Professional experience working in heritage resource management or a related field, including at least some experience in lab work, field work, planning and consultation, and project and budget management. 1-2 years of professional employment are recommended.

The archaeology graduate admissions committee may offer, at its discretion, MA admission to exceptional students without an undergraduate degree in archaeology, anthropology, or a related field. Minimally we require demonstrated competence in field archaeology or a cognate domain of professional practice in heritage resource management.

Students who do not have the proper background in heritage resource management are advised to obtain this background through participation in heritage resource management activities and programs, especially heritage site identification, significance assessment, and impact avoidance or reduction.

Students may transfer from the HRM graduate certificate to the HRM master's following the completion of ARCH 531 and ARCH 541 with a minimum GPA of 3.0 and the approval of the HRM program director.

Program Requirements

This program consists of a cohort orientation program on the Burnaby campus, course requirements and a thesis for a minimum of 38 units.

Students complete all of

[ARCH 531 - HRM Law and Policy \(5\)](#)

[ARCH 541 - HRM Professional Practice and Ethics \(5\)](#)

REVISED CALENDAR ENTRY

ARCH 551 - HRM Business Management (5)

ARCH 561 - HRM Archaeological Research Design and Methods (5)

and a thesis

ARCH 898 - MA Thesis (18)

Program Length

Students are expected to complete the program requirements in six terms.

Other Information

Course Work

Students who have completed the HRM graduate certificate will receive 10 units of advance credit for course work already completed, and are required to complete 10 additional units of graduate course work and a thesis for a minimum of 38 units. The additional units will include ARCH 591, or comparable course work, as approved by the HRM director.

Thesis

After completion of the four required courses, students advance to candidacy and complete and defend the thesis. The defence topic should be the thesis itself and related matters. It should be focused on problem-oriented research in the heritage resource management field, involving the conceptualization of an archaeological problem, and the collection, analysis, interpretation and presentation of data.

Academic Requirements within the Graduate General Regulations

All graduate students must satisfy the academic requirements that are specified in the [Graduate General Regulations](#), as well as the specific requirements for the program in which they are enrolled.

ACRA

American Cultural Resources Association

August 24, 2018

Dr. John Welch
Department of Archaeology and School of Resource and Environmental Management
Simon Fraser University
Burnaby, Unceded Coast Salish Territory, BC, Canada V5A 1S6

Dear Dr. Welch,

On behalf of the American Cultural Resources Association (ACRA), I am pleased to provide comments on the Simon Fraser University proposed Master Program in Heritage Resource Management. The SFU Master's and Certificate program goes beyond a traditional advanced degree and highlights real-world topics not covered in traditional programs, but highly valued by employers of HRM professionals.

The field of Cultural Resource Management (or Heritage Resource Management as you prefer) is highly diverse and dynamic. As an industry, we recognize the need for educational programs that prepare potential employees, managers, and owners for the non-technical aspects of our fields. Technical skills, which are the focus in traditional programs and often learned through experience, are highly important. However, technical skills and traditional programs rarely prepare students for the realities of working in a business environment. In the CRM business environment, cultural (or heritage) resources, client needs, regulatory requirements, permit stipulations, and the business itself are forces that guide everyday activity. Traditional Master's programs prepare students for the technical aspects of our field, but very few programs require students to understand business and how to ethically and properly balance the variety of forces that effect CRM practitioners. The SFU Master's program is one of very few programs that is bridging the gap between the technical, ethical, and business needs of our industry.

I hope that the SFU program will continue to develop and grow. Further, I hope that I have the opportunity to hire a graduate!

Sincerely,


Kim Redman,
President, ACRA

August 13, 2018

To Whom It May Concern:

Subject: Professional Master's in Heritage Resource Management

Please accept this letter which conveys my endorsement of the Professional Master's in Heritage Resource Management program offered by the Department of Archaeology, Faculty of Environment, Simon Fraser University (SFU). This program offers one of few opportunities in North America for students and working professionals to obtain a post-graduate degree that focuses specifically on the field of Cultural Resource Management (CRM). From the perspective of archaeological resource management in Alberta, the availability of such a program is considered both timely and relevant. CRM field programs conducted on behalf of industrial or commercial developers represent more than 90% of the archaeological work undertaken on an annual basis in Alberta. This has led to the development of a multi-million dollar CRM industry that employs hundreds of heritage professionals. Growing cohorts of students choose to pursue careers as professional CRM archaeologists following completion of undergraduate studies. The SFU Heritage Resource Management program provides these students with pertinent instruction in the practical, regulatory, legal and ethical aspects of CRM and places them in good stead to perform with competence in the field. As in many other jurisdictions, Alberta requires practicing archaeologists to have completed a thesis-based, post-graduate degree in archaeology or anthropology. The SFU Master's program fulfills this thesis requirement at high academic standards, most commonly focusing on research topics of direct practical relevance to the conduct of CRM archaeology in Alberta contexts. It is my opinion that the SFU program surpasses in both content and achievement the increasingly popular, short-term Master's degree programs in CRM offered by European institutions. We support SFU's Professional Master's in Heritage Resource Management program because it will contribute to the development of highly-qualified, locally-trained individuals to serve the future needs of Alberta's archaeological resource management programs and initiatives.

Yours truly,



Darryl Bereziuk
Director,
Archaeological Survey of Alberta,
Historic Resources Management Branch

Archaeological and Cultural Education Consultants

August 9, 2018

John R. Welch, Ph.D., RPA
Department of Archaeology and
School of Resource and Environmental Management
Simon Fraser University
Burnaby, BC, Canada V5A 1S6

Dear John:

Thank you for allowing me the opportunity to write a letter in support of the Heritage Resource Management (HRM) Program becoming a Full Program Plan (FPP) and an ongoing fixture in the SFU calendar.

In 2015, I was hired as a consultant by the University of Maryland's Department of Anthropology to explore the idea of creating an on-line or hybrid professional track graduate degree program in Cultural and Heritage Resource Management. The initial step was to research current cultural resource management (CRM) and heritage resource management (HRM) programs and to identify knowledge and skills that employers felt was lacking in most new employees. Based on the findings, the Department of Anthropology decided that there was in fact a niche to be filled and we moved forward with the development of a proposal to create a cultural and heritage resource management (CHRM) program.

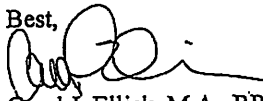
During our research, we found that the vast majority of CRM or HRM programs were housed on-campus, were aimed at traditional students, and that the curriculums didn't vary much from a traditional archaeology degree. The programs were based on what the traditional academically trained professors identified as necessary for entering the profession of CRM, as opposed to what the employers actually wanted and needed.

There were very few exceptions to this model and the only university of similar standing to the University of Maryland was SFU. When the information on the SFU HRM program was reviewed during a meeting, some of my academic colleagues got a bit nervous about program development and the potential for meeting the minimum enrollment requirements. One person referred to the SFU program as the "Cadillac" of HRM programs and felt that there was no way we could compete with their standard.

My career started in CRM in 1979. I have worked on countless projects for agencies, CRM firms, and CRM programs housed within academic institutions. I serve on the Board of Directors for the American Cultural Resources Association. There are more than 1,300 CRM and HRM firms in the U.S., employing more than 10,000 individuals and for the most part, those individuals have had to learn the business of CRM on the job.

As a project director, I've witnessed the struggle employees have with understanding how what they do fits within the context of a CRM project. It is essential that academic institutions provide those entering CRM and HRM with the knowledge and skills of the profession. SFU's HRM program does this. Their students graduate with knowledge and skills that satisfy employment needs, professional standards, and will hopefully be able to move the profession forward in North America. By SFU making the HRM Program a Full Program Plan (FPP) and an ongoing fixture in the SFU calendar, you will again set the standard for academic institutions.

Best,



Carol J. Ellick, M.A., RPA
Executive Director
Archaeological and Cultural Education Consultants



26 July 2018

Dr. John Welch, Professor and Director
Professional Graduate Program in Heritage Resource Management
Simon Fraser University
Department of Archaeology and School of Resource and Environmental Management
Burnaby, BC, Canada
V5A 1S6

SFU ARCHAEOLOGY - HERITAGE RESOURCE MANAGEMENT PROGRAM

Dear John:

Thank you for sharing your news concerning the SFU Department of Archaeology's intention to submit a Full Program Plan (FPP) for the Heritage Resource Management (HRM) Program. Golder Associates is pleased to offer our support for this initiative.

As you are aware, Golder has benefited directly from the HRM Program through the involvement of Casey O'Neill from our Whitby, Ontario, office. The HRM Program will allow Casey to take the next important step in his career, and he already has shared many insights and learnings from the HRM Program with his colleagues at Golder. I am equally pleased to see a number of archaeologists from government (e.g., BC Oil & Gas Commission) and from Crown Corporations such as BC Hydro participating in the program.

The HRM Program addresses a critical gap in education and will undoubtedly raise the level of professionalism in commercial heritage management circles. This will benefit the discipline of archaeology, practitioners, project proponents, government, and most importantly, descendant communities. Institutionalization of the HRM Program is an important step of which we are fully supportive.

We wish you continued success.

Golder Associates Ltd.

Andrew (Andy) Mason, MA, RPCA
Principal, Cultural Heritage Specialist

Heritage Business International, L3C

PO Box 17539, Tucson, AZ 85731-7419

24 July 2018



Dr. John R. Welch
Director, Professional Graduate Program in Heritage Resource Management
Simon Fraser University
Burnaby, BC, Canada V5A 1S6

RE: Support for Master of Arts in Heritage Resource Management Full Program Proposal

Dear Dr. Welch:

It is my pleasure to write this letter in support of full program approval for the Master of Arts in Heritage Resource Management. I'm writing this letter as a consultant working for Heritage Business International (HBI), a firm that provides industry data and business support for heritage organizations. I've also served as the President of the American Cultural Resources Association and am currently the President of the Register of Professional Archaeologists—positions through which I've gained knowledge of applied archaeology and industry economics.

First, it must be recognized that over the last 50 years heritage has been privatized in the Americas and around the world. Today, heritage compliance is a \$2 billion (U.S.) dollar industry globally and more than half of that value is represented by Canada and the U.S. Non-compliance archaeological work (traditional grant-funded research) in Canada and the U.S. is valued at only \$30 million, or about three percent. The non-compliance sectors of the heritage industry are even larger (over \$200 billion in the U.S. alone). Approximately 82 percent of professional archaeologists in North America work outside of academia.

Despite the economic data, few academic programs have responded to the radical changes that have occurred to archaeology as a profession. Simon Fraser University's program is one of a very few that has responded, and responded in innovative ways that meet the needs and realities of working heritage professionals who need additional education and skills to advance in a privatized archaeology. As an example, and one that HBI obviously cares about, Arch 551 Heritage Business and Management is the only class that I know of at any university in the world that provides true business education tailored to the heritage industry. Regardless of how proficient students are at "doing" archaeology, they won't have a successful career in a privatized profession if they can't return financial value to their employer. For good or for bad, this is the new reality of working heritage professionals in a privatized archaeology.

SFU's Master of Arts in Heritage Resource Management is leading academia in providing archaeologists trained for a 21st century archaeology. I encourage you to support continuing this program and granting it full program approval.

Sincerely,

Christopher D. Dore, Ph.D., M.B.A., RPA 10331



SOCIETY FOR AMERICAN ARCHAEOLOGY

August 6, 2018

John R. Welch, Registered Professional Archaeologist 10227
Professor and Director, Professional Graduate Program in Heritage Resource Management
Department of Archaeology and School of Resource and Environmental Management
Simon Fraser University
Burnaby, Unceded Coast Salish Territory, BC, Canada V5A 1S6

Dear Dr. Welch:

The Society for American Archaeology (SAA) is pleased to provide this letter of support for the Department of Archaeology and School of Resource and Environmental Management's submission of a Full Program Plan for the Heritage Resource Management (HRM) Program at Simon Fraser University (SFU).

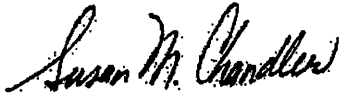
SAA is an international organization that, since its founding in 1934, has been dedicated to the research about and interpretation and protection of the archaeological heritage of the Americas. With more than 7,000 members, SAA represents professional archaeologists in colleges and universities, museums, government agencies, and the private sector. SAA has members throughout the United States and Canada as well as many other nations around the world. SAA's 2015 most recent needs assessment survey, conducted in 2015, indicates that 25 percent of our members are employed in the private HRM sector and another 16 percent are employed as federal, state, or tribal archaeologists. Despite the increasing prevalence of heritage resource management as the career path for professional archaeologists, traditional academic programs are not tailored to meet the needs of these HPM professionals.

The HRM Program at SFU thus fills an important niche in the education of archaeologists, providing necessary instruction in leadership, community engagement, strategic and critical thinking, and project management. The Law and Policy, Practice and Ethics, Business Management, and Research Design and Methods courses offered provide students with an in-depth education of the most important topics facing HRM professionals – courses that are not offered in traditional archaeology graduate programs. The required Master's thesis is another critical component of the HRM Program. It requires students to demonstrate their proficiency in both research and writing. Furthermore, a thesis-based Masters degree is the required degree to hold HRM archaeology permits or licenses in many Canadian jurisdictions. The SFU MA also satisfies the U.S. Secretary of the Interior's guidelines for supervising HRM projects on federal lands in the United States. Furthermore, SFU graduates who write a thesis as part of their program will be eligible upon graduation to become Registered Professional Archaeologists (RPA) as well as to obtain professional standing in the Institute of Archaeology (IFA). In short, SFU graduates of the MA HRM program will have all the tools necessary to craft successful careers in the diverse and dynamic HRM industry.

August 6, 2018
Welch, page 2

On a personal note, I owned an HRM consulting firm for 30 years (Alpine Archaeological Consultants, Inc., founded in 1987). Alpine found it challenging to hire a sufficient number of professional archaeologists with Master's degrees. It was also extremely difficult for our staff with Bachelor's degrees to complete a Master's degree while living in rural Colorado. The few who were able to do so without leaving our employ completed their education through the University of Leicester. Had the HRM Program at SFU been in place, we would have certainly encouraged our employees to enroll there.

Sincerely,

A handwritten signature in cursive script that reads "Susan M. Chandler".

Susan M. Chandler, Register of Professional Archaeologists #11282
President, Society for American Archaeology



STÓ:LŌ RESOURCE & RESEARCH MANAGEMENT CENTRE

Bldg. 10 – 7201 Vedder Road, Chilliwack, B.C. V2R 4G5
Tel: No. (604) 824-2420/FAX No. (604) 824-0278
Toll Free: 1-877-924-2420

August 22, 2018

Dr. John R. Welch, Professor and Director
Professional Graduate Program in Heritage Resource Management
Simon Fraser University
Department of Archaeology
Burnaby, BC, Canada
V5A 1S6

RE: Heritage Resource Management Program Proposal

Dear John;

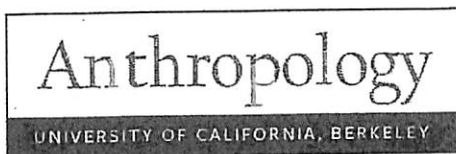
It is my pleasure as the director of the Stó:lō Research and Resource Management Centre to endorse the SFU Department of Archaeology's Full Program Plan (FPP) for the Heritage Resource Management (HRM) Program. Our Centre is dedicated to the conservation-focused management of the Lower Fraser River Watershed and adjacent areas, a mission that requires attention to diverse land and resource stewardship issues and concerns, including heritage resource management. It has been exciting to participate in discussions since 2015 regarding the planning and implementation of the HRM Program, and it is gratifying to learn that the program is to be considered for continuing status. We give our full support for the program.

The HRM Program serves a perpetually underserved audience of junior archaeologists and HRM practitioners and has already been successful in boosting professionalism in heritage management. The program curriculum's focus on policy and ethics, as well as management and research, is particularly appropriate for and attractive to Indigenous archaeologists and those who work for and with Native communities. Systematic training for archaeologists and heritage managers in the international and practical contexts of HRM will benefit the archaeology, employers, governments, and Native communities. As per our various discussions, the Centre intends to facilitate the enrollment of at least two members of our staff in the HRM Program in the next three years.

With all best wishes for success with the Full Program Proposal,

Dr. David Schaepe, Director
Stó:lō Research and Resource Management Centre





August 22, 2018

John R. Welch, Registered Professional Archaeologist 10227
Professor and Director, Professional Graduate Program in Heritage Resource Management
Department of Archaeology and School of Resource and Environmental Management
Simon Fraser University
Burnaby, Unceded Coast Salish Territory, BC, Canada V5A 1S6

Dear Dr. Welch,

I am writing to state my support for the Department of Archaeology and School of Resource and Environmental Management's submission of a Full Program Plan for the Heritage Resource Management (HRM) Program at Simon Fraser University. As an archaeologist who has practiced cultural resource management (CRM) in the United States since 2002, I can honestly say this is the sort of program that is sorely needed in North America.

As an undergraduate, HRM and/or CRM were never mentioned in any of my anthropology classes. I had no idea how to get a job in archaeology or how American archaeology was practiced outside academia when I graduated. It was not until I started a Master's program that I learned about the world of CRM. While my Master's program provided opportunities for graduate students to work on CRM projects, there was little discussion of business practices or the mechanics of the industry. I earned a Master's but was not prepared for the industry. I completed my Master's in 2005 and, after months of interviewing and applying, landed my first CRM position in Seattle. My first few years in the industry were spent struggling to complete fieldwork within tight budgets while also doing quality work and adhering to state and national historic preservation regulations. The learning curve was steep as, at the time, the only way to learn how to do CRM was by doing CRM. Sadly, this is the way it has been in CRM since its inception.

Simon Fraser's HRM Program is what the industry needs to train tomorrow's CRM archaeologists. It also comes at the perfect time. In the United States, historic and environmental preservation regulations are under attack. Part of the argument against preservation is its cost. Project proponents feel like compliance work is too expensive. At the same time, indigenous and descendant groups are advocating for the preservation of their heritage, and local communities are doing what they can to foster heritage-related industries. The tension between developers, government agencies, and communities is strained all the more when CRM companies are unable to hire new employees who understand regulatory contexts and market forces while also adhering to archaeological codes of ethics.

After reviewing HRM Program curriculum, the instructors' professional backgrounds, and speaking with other cultural resource management professional not affiliated with Simon Frasier, I can see that this program is one of the best able to train the cultural resource management archaeologists needed to do the complicated work our communities deserve. The program is designed to cover the regulatory and business fundamentals necessary to manage cultural resources archaeology projects. The program courses also introduce students to collaboration with descendant communities in ethical, pragmatic ways. Program graduates will meet the qualifications to become Registered Professional Archaeologists upon completion, which is a valuable asset to those who go on to continue their careers in HRM/CRM. Most importantly, the program is largely online and accepts students from the United States, which makes it more accessible to a wider range of individuals including non-traditional or professional students who may not be able to attend courses in a traditional program.

The HRM Program at Simon Frasier has been in operation for only a short time but I believe it is landmark. It has the potential to influence programs at other universities in the United States and Canada. The Program's structure and content were designed to meet the needs of the HRM/CRM industry and communities in which CRMers practice. This is the program I wish had existed when I was a Master's student.

Again, I highly support the Full Program Plan for the HRM Program at Simon Frasier University. Please, feel free to contact me at (206) 501-6667 (wawhite@berkeley.edu) if you have any questions.

Sincerely,

William A. White, III
RPA Number 15769
Assistant Professor
Department of Anthropology
University of California, Berkeley

John R. Welch, PhD, Registered Professional Archaeologist 10227
Professor & Director of the Professional Master's Program in Heritage Resource Management
Department of Archaeology & School of Resource and Environmental Management
Simon Fraser University welch@sfu.ca - <http://www.sfu.ca/rem/people/profiles/welch.html>

EDUCATION

- 1996 Ph.D. Anthropology, University of Arizona, Tucson, U.S.
1985 M.A. Anthropology, University of Arizona, Tucson, U.S.
1983 A.B. Anthropology (Honors), Spanish, Hamilton College, Clinton, New York, U.S.

CURRENT COURSE PORTFOLIO

HRM Law & Policy

Cultural Heritage Management

Social Science of Resource Management

Environmental Law in Indian Country

CURRENT EMPLOYMENT

April 2005–Current

Professor & Director of the Professional Graduate Program in Heritage Resource Management, jointly appointed in the Department of Archaeology and School of Resource and Environmental Management, Simon Fraser University

RECENT FUNDING FOR RESEARCH & SCHOLARLY PURSUITS (Since 2014)

- Grant:** Interdisciplinary Workshop Grant **Period:** 2018–2019 **Project Title:** Cultural Heritage Crime and Forensic Sedimentology: Global Theoretical and Local Tactical Responses to Thwart and Prosecute Heritage Destruction and Theft **Funding:** Wenner-Gren Foundation for Anthropological Research **Total:** \$20,000 **Involvement:** Project Director **Collaboration:** I will plan and facilitate a 2018 workshop at Fort Apache to focus theoretical perspectives and practical tools on the prevention, investigation, and punishment of heritage Resource Crime.
- Contract:** Professional Consulting Services **Period:** 2018–2018
Project Title: A Forensic Sedimentology Toolkit and Training Guide for the Investigation and Prosecution of Archaeological Resource Crime **Funding:** Bureau of Indian Affairs, Arizona **Total:** \$22,500 **Involvement:** Toolkit development consultant **Collaboration:** I support and serve as liaison between the core team of US Federal Government personnel (land management and law enforcement) and the technical team of research and forensic scientists.
- Grant:** Graduate Research Fellowship Grant **Period:** 2017–2018 **Project Title:** Climate Change Adaptation Planning in Two Indigenous Conservation Organizations. **Funding:** Pacific Institute for Climate Studies **Total:** \$5000 **Involvement:** Project Director **Collaboration:** I direct and support master's research by Vivian Gauer with the Fort Apache Heritage Foundation and the Stolo Research and Resource Management Centre.
- Grant:** Open Educational Resource Development Grant (SFU) **Period:** 2016–2017
Project Title: OER Assessment and Development for a New Breadth-Humanities Course, Heritage Stewardship in Global Context (ARCH 286) **Funding:** SFU Library OER Fund **Total:** \$3000
Involvement: Project Director **Collaboration:** Facilitate collaborations among Erin Hogg, Hope Power, and other SFU colleagues in identifying and refining OERs for ARCH 286.

5. **Grant:** Publication Grant **Awarded:** 2016 **Period:** 2016–2017
Project Title: Digital Publication of the SFU Archaeology Press Catalogue **Funding:** SFU Scholarly Digitization Fund **Total:** \$4960 **Involvement:** Principal Investigator **Collaboration:** Facilitate creation of a comprehensive online compendium of the 31 books published by SFU Archaeology Press.
6. **Grant:** Research Grant **Period:** 2016 **Project Title:** ‘Ground Truthing’ of Ancestral Pueblo Settlement of the Southern and Western Flanks of Arizona’s White Mountains, White Mountain Apache Tribe Lands, Arizona. **Funding:** Arizona Archaeological and Historical Society **Total:** \$500 **Involvement:** Project Director **Collaboration:** I led seven colleagues on a mobile symposium to visit and boost documentation for 16 Ancestral Pueblo villages.
7. **Contract:** Professional Consulting Services **Period:** 2016
Project Title: San Carlos Apache Strike Team **Funding:** San Carlos Apache Tribe, Arizona **Total:** \$19,650 **Involvement:** Cultural heritage consultant **Collaboration:** I supported the Apache Strike Team’s opposition to the Proposed Resolution Copper Mine by conducting historical research and preparing strategic assessments of documents and plans prepared by the mining company, U.S. Forest Service, and their consultants.
8. **Contract/Grant:** Research and Exhibition / Outreach **Period:** 2015–2016
Project Title: Scowlitz Virtual Museum Companion Project **Funding:** SFU Community Engagement Fund **Total:** \$10,000 **Involvement:** Co-Principal Investigator **Collaboration:** I support Kate Hennessey (SFU SIAT) and David Schaepe in developing and installing twin exhibits—in the SFU Museum of Archaeology and Ethnology and the Sto:lo Research and Resource Management Centre—to expand the reach of the Virtual Museum of Canada website dedicated to the Scowlitz ancestral village site.
9. **Contract/Grant:** Professional Consulting Services **Period:** 2015–2016
Project Title: A Cultural Heritage Program for the San Carlos Apache **Funding:** Resolution Copper Mining Corporation, Arizona **Total:** \$10,578 **Involvement:** Cultural heritage consultant **Collaboration:** I supported Statistical Research Inc. Foundation and Apache colleagues in creating a values-based program to protect and perpetuate Apache cultural heritage in the face of changing social, economic and biophysical environments.
10. **Grant:** Curriculum Development Research **Period:** 2015–2016
Project Title: Assessment of a Required Graduate Course, *Social Science of Resource Management: Theories of Cooperation* (REM 601) **Funding:** SFU Teaching and Learning Center **Total:** \$5000 **Involvement:** Project Director **Collaboration:** I worked with Soudeh Jamshidian and other SFU colleagues to survey students and refine REM 601, the social science core course in the Master’s of Resource Management (MRM) program.
11. **Grant:** Curriculum and Credential Development **Period:** 2015–2016
Project Title: A Professional Online MA Program in Heritage Resource Management (HRM) **Funding:** SFU Professional Online Scholarship and Training (POST) grant **Total:** \$100,000 **Involvement:** Program Director **Collaboration:** I facilitated SFU and HRM industry collaborations to create and deliver a new Master’s program, starting fall 2016.
12. **Grant:** Research Grant **Period:** 2015–2017
Project Title: Trails of the Apache **Funding:** SSHRC Small Institutional **Total:** \$6950 **Involvement:** Principal Investigator **Collaboration:** I directed landscape-scale efforts to document ancient Apache activity hubs using least-cost path GIS analyses to identify trails and the residential, agricultural, and foraging localities they connect.

RECENT PEER-REVIEWED CONTRIBUTIONS (Since 2014)

1. Welch, John R.; Burley, David V.; Driver, Jonathan C.; Hogg, Erin A.; Jayasundera, Kanthi; Klassen, Michael; Maxwell, David; Nicholas, George P.; Pivnick, Janet; and Dore, Christopher D. (2018) Digital Bridges Across Disciplinary, Practical and Pedagogical Divides: An Online Professional Master's Program in Heritage Resource Management. *Journal of Archaeology and Education* 2. <https://digitalcommons.library.umaine.edu/jae/vol2/iss2/1>
2. Welch, John R. (2018) Sovereignty-Driven Research. In *Giving Back: Research and Reciprocity in Indigenous Settings*, pp. 307–329, edited by R. Douglas K. Herman. Oregon State University Press.
3. Schaepe, David, Bill Angelbeck, David Snook, and John R. Welch (2017) Archaeology as Therapy: Connecting Belongings, Knowledge, Time, Place, and Well-Being. *Current Anthropology* 58(4):502-533. doi: 10.1086/692985.
4. Welch, J.R. (2017) Earth, Wind, and Fire: Pinal Apaches, Miners, and Genocide in Central Arizona, 1859-1874. *Sage Open* (October-December):1-19. doi: 10.1177/2158244017747016. <http://journals.sagepub.com/doi/full/10.1177/2158244017747016>
5. Saul L. Hedquist, Alyson M. Thibodeau, John R. Welch, and David J. Killick (2017) Canyon Creek Revisited: New Investigations of a Late Prehispanic Turquoise Mine, Arizona, USA. *Journal of Archaeological Science* 87: 44-58. doi: 10.1016/j.jas.2017.09.0040305-4403.
6. Welch, John R., Sarah A. Herr, and Nicholas C. Laluk (2017) Ndee (Apache) Archaeology. In *Oxford Handbook of Southwest Archaeology*, edited by Barbara J. Mills and Severin Fowles, pp. 495-512. Oxford University Press, New York. DOI: 10.1093/oxfordhb/9780199978427.013.26
7. Hogg, Erin A., Welch, J.R. & Ferris, Neal (2017) Full Spectrum Archaeology. *Archaeologies* 12:1-26. doi:10.1007/s11759-017-9315-9
8. Welch, John R. and Joseph A. Ezzo (2017) Agricultural Commitment in the Grasshopper Region. In *The Strong Case Approach in Behavioral Archaeology*, pp. 35-50, edited by Michael B. Schiffer, Charles R. Riggs, and J. Jefferson Reid. University of Utah Press, Salt Lake City.
9. Welch, J.R., Editor (2016) *Dispatches from the Fort Apache Scout: White Mountain and Cibecue Apache History Through 1881*, By Lori Davisson, with Edgar Perry and the Original Staff of the White Mountain Apache Cultural Center. University of Arizona Press, Tucson.
10. Natasha Lyons, David M. Schaepe, Kate Hennessy, Michael Blake, Clarence Pennier, Kyle McIntosh, Andy Phillips, J.R. Welch, and others (2016) Sharing Deep History as Digital Knowledge: An Ontology of the Sq'ewlets First Nation Website Project. *Journal of Social Archaeology* 16(3):359–384. DOI:10.1177/1469605316668451.
11. Welch, J.R. and Evelyn Pinkerton (2015) 'Ain't Gonna Study War No More': Teaching and Learning Cooperation in a Graduate Course in Resource and Environmental Management. *Groupwork* 25(2):6-30.
12. Hoerig, Karl A., J.R. Welch, T. J. Ferguson, and Gabriella Soto (2015) Expanding Toolkits for Heritage Perpetuation: The Western Apache Ethnography and Geographic Information Science Research Experience for Undergraduates. *International Journal of Applied Geospatial Research* 6(1):60-77.
13. Welch, J.R. (2015) The Last Archaeologist to (Almost) Abandon Grasshopper. *Arizona Anthropologist* (Centennial Edition):107-119. <https://webcache.googleusercontent.com/search?q=cache:XkNrK4Tk2I0J:https://journals.uair.arizona.edu/index.php/arizanthro/article/download/18856/18499+&cd=1&hl=en&ct=clnk&gl=ca>

14. Ferris, Neal, and J.R. Welch (2015) *New Worlds: Ethics in Contemporary North American Archaeological Practice*, in *Ethics and Archaeological Praxis*, edited by Cristobal Gnecco and Dorothy Lippert, pp. 69–92. Springer, New York.

CURRENT GRADUATE STUDENT SUPERVISION (Committee Chair)

Name	Degree	Project / Thesis	Start–Finish
Campbell, Michael	M.A. (HRM)	TBA	2017–
Johnson, Meghan	M.A. (HRM)	Replication of a Clovis Stone Tool Cache	2017–
McKillops, Vanessa	M.A. (HRM)	Modeling Pleistocene-Holocene Coastal Occupation of the Nova Scotia Coast	2017–
Owens, Camille	M.A. (HRM)	Engaging Public Archaeology Protocols in the Interpretation of Museum Collections	2017–
Pitul, Michael	M.A. (HRM)	A Policy Framework for Underwater Archaeology in Ontario	2017–
O’Neil, Casey	M.A. (HRM)	Policy and Practice Recommendations for Chance Finds Management in British Columbia	2016–
Gauer, Viviane	M.R.M.	Climate Change Adaptation Planning if Two Native-Owned Conservation Organizations	2016–
Jaclyn McLeod	M.A.	Comparing Museum Presentations and Archaeological Records of Chinese History	2016–
Huck, Michael	M.R.M.	Community-Based Climate Change Adaptation Planning in Limberly, B.C.	2015–
Hogg, Erin	Ph.D.	Archaeological Contributions to Land Claims	2014–
Jamshidian, Soudeh	Ph.D.	Effects of Top-Down Environmental Management in Post-Conflict Settings	2007–
Aaron Naumann	Ph.D.	University of Washington / Indigenous Archaeology Revisited	2016–

CURRENT SERVICE RELEVANT TO HRM

2017–2019	Registrar, Register of Professional Archaeologists
2015–2019	Member, Editorial Board, <i>Advances in Archaeological Practice</i>
2014–2018	Co-Chair, Amity Pueblo Task Force, Society for American Archaeology
2007–2018	Member and Board Secretary, Fort Apache Heritage Foundation Board of Directors

GEORGE P. NICHOLAS, PH.D.

Professor and Chair, Department of Archaeology, Simon Fraser University
Director, Intellectual Property Issues in Cultural Heritage (IPinCH) Project

Web: http://www.sfu.ca/archaeology/dept/fac_bio/nicholas/index.htm

IPinCH Project: <http://www.sfu.ca/IPinCulturalHeritage>

Education

1990 PhD, University of Massachusetts-Amherst.

1979 MA, University of Missouri-Columbia.

1975 BA. (Magna cum laude with Honors in Anthropology), Franklin Pierce College, Rindge, NH.

Current Service

2017–2020 Chair, Department of Archaeology, SFU

2008–2016 Director, Intellectual Property Issues in Cultural Heritage (IPinCH) Project

2015– Chair, Repatriation Committee, Department of Archaeology, Simon Fraser University

2016–2019 Chair, Committee on Native American Relations, Society for American Archaeology

Grants

2017 (and J. Driver). SFU Teaching and Learning Development Program grant for “Assessing the Need for Professional Training Modules for Archaeology Students.” (\$6,000).

2008-2015 MCRI Grant for “Intellectual Property Issues in Cultural Heritage: Theory, Practice, Policy, Ethics” Project,” Social Sciences and Humanities Research Council (\$2.5 million).

2015 SSHRC Connections Grant for “DNA and Indigeneity: Exploring the (Re)-Construction of Identity at the Interface of Biology and Culture.” (\$20,410).

Publications (Selected Since 2014)

Books/Special Publications

Walker, A., B. Egan, and G. Nicholas (editors). 2016. *DNA and Indigeneity: The Changing Role of Genetics in Indigenous Rights, Tribal Belonging, and Repatriation. Symposium Proceedings.* IPinCH Project, Simon Fraser University, Burnaby, BC. 68 pp.

http://www.sfu.ca/ipinch/sites/default/files/resources/reports/dnaindigeneity_proceedings_2016.pdf

Book Chapters

2018. “Listening to Whom, and for Whose Benefit?” Promoting and Protecting Local Heritage Values. In *Archaeologies of Listening*, edited by P. Schmidt and A. Kehoe. University Press of Florida. In press.

2017. Touching the Intangible: Situating Material Culture in the Realm of Indigenous Heritage Research. In *The Routledge Companion to Cultural Property*, edited by H. Geismar and J. Anderson, pp. 212–231. Routledge, New York.

2017. Culture, Rights, Indigeneity, and Intervention: Addressing Inequality in Indigenous Heritage Protection and Control. In *Archaeologies of ‘Us’ and ‘Them’ –Debating the Ethics and Politics of Ethnicity and Indigeneity in Archaeology and Heritage Discourse*, edited by C. Hillerdal, A. Karlström, C-G. Ojala, pp. 199–216. Routledge, New York.

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America. In *Museums and Archaeology*, edited by R. Skeates, pp. 608–616. Leicester Readers in Museum Studies, Routledge.

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- and N.M. Markey. 2014. Traditional Knowledge, Archaeological Evidence, and Other Ways of Knowing. In *Material Culture as Evidence: Best Practices and Exemplary Cases in Archaeology*, edited by R. Chapman and A. Wylie, pp. 287–307. Routledge Press.
2014. Indigenous Archaeology (“Archaeology, Indigenous”). In *Oxford Bibliography of Anthropology*, edited by J.L. Jackson. Oxford University Press, Oxford.
2014. Indigenous Cultural Heritage in the Age of Technological Reproducibility: Towards a Post-colonial Ethic of the Public Domain. In *Dynamic Fair Dealing: Creating Canadian Culture Online*, edited by R.J. Coombe, D. Wershler, and M. Zeilinger, pp. 213–224. University of Toronto Press, Toronto.
2014. Reconciling Inequalities in Archaeological Practice and Heritage Research. In *Transforming Archaeology: Activist Practices and Prospects*, edited by S. Atalay, L. Clauss, R. McGuire, and J. Welch, pp. 133–158. Left Coast Press, Walnut Creek, CA.

Journal Articles

- Martindale, A., N. Lyons, G.P. Nicholas (with B. Angelbeck, S. Connaughton, C. Grier, J. Herbert, M. Leon, Y. Marshall, A. Piccini, D. Schaepe, K. Supernant, and G. Warrick). 2016. Archaeology as Partnerships in Practice: A Reply to La Salle and Hutchings. *Canadian Journal of Archaeology* 40: 181–204.
- Martindale, A., and G.P. Nicholas. 2014. Wayfinding: Archaeology as Federated Knowledge. *Canadian Journal of Archaeology* 38(2): 434–465.
- Watkins, J., and G.P. Nicholas. 2014. Why Indigenous Archaeology is Important as a Means of Changing Relationships between Archaeologists and Indigenous Communities. In *Indigenous Heritage and Cultural Tourism: Theories and Practices on Utilizing the Ainu Heritage*, edited by M. Okada and H. Kato, pp. 141–151. Center for Ainu and Indigenous Studies, Hokkaido University, Japan.

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- Coombe, R., K. Bannister, D. Schaepe, and G. Nicholas. 2014. Declaration on the Safeguarding of Indigenous Ancestral Burial Grounds as Sacred Sites and Cultural Landscapes. <http://www.sfu.ca/ipinch/resources/declarations/ancestral-burial-grounds>.

Short Articles, Essays, Encyclopedia Entries, and Blogs

- 2018 Converging or Contradictory Ways of Knowing: Assessing the Scientific Nature of Traditional Knowledge. Guest columnist, Traditional Ecological Knowledge, U.S. National Parks Service. <https://www.nps.gov/subjects/tek/george-nicholas.htm>
- 2018 “It’s taken thousands of years, but Western science is finally catching up to Traditional Knowledge.” *The Conversation*. <https://theconversation.com/its-taken-thousands-of-years-but-western-science-is-finally-catching-up-to-traditional-knowledge-90291>
- 2017 “Threats to Bear Ears and other Indigenous sacred sites are a violation of human rights. *The*

Conversation. <https://theconversation.com/threats-to-bear-ears-and-other-indigenous-sacred-sites-are-a-violation-of-human-rights-87609>

Nicholas, G. 2016. Who Are We? In *The Changing Role of Genetics in Indigenous Rights, Tribal Belonging, and Repatriation: Symposium Proceedings*, edited by A. Walker, B. Egan, and G. Nicholas, pp. 7-8. IPinCH Project, Simon Fraser University, Burnaby, BC.

Nicholas, G., and A. Walker. 2016. Towards an Understanding of Indigenous DNA Research. In *DNA and Indigeneity: The Changing Role of Genetics in Indigenous Rights, Tribal Belonging, and Repatriation. Symposium Proceedings*, edited by A. Walker, B. Egan, and G. Nicholas, pp. 55-57. IPinCH Project website. IPinCH Project, Simon Fraser University, Burnaby, BC.

—, A. Walker, and A. Goodman. 2016. DNA and Indigeneity. *Anthropology News*, American Anthropological Association, March.

— and J. Watkins 2014. Indigenous Archaeologies in Archaeological Theory, pp. 3777-3786. *Global Encyclopedia of Archaeology*, Springer, New York.

Watkins, J., and G. Nicholas. 2014. Indigenous Archaeologies: North American Perspective, pp. 3794-3803. *Global Encyclopedia of Archaeology*, Springer, New York.

Videos and Video Interviews

2016 “Pragmatism at the Intersection of Indigeneity, Cultural Property, and Intangible Heritage.” Djavad Mowafaghian World Art Centre, Vancouver. <https://www.sfu.ca/video-library/video/1547/view.html>

2015 “Conserving an Alutiiq Kayak: Situating ‘Intent’ in the Intangible.” <https://www.bgc.bard.edu/news/past-events-09-10/alutiiq-kayak.html>

2014 “Why Heritage is Not *Just* About Things.” TEDx Yellowknife, in conjunction with *Itaa Yati* Traditional Knowledge Symposium.. Yellowknife, NWT. <https://www.youtube.com/watch?v=HbPLXTJwVMY&list=PLjMPDTlr8hYk3cIx-Xa00FR3uAde6VnK6>

2014 Scientific Reasoning, and Intangible Heritage Protection.” *Itaa Yati* Traditional Knowledge Symposium. Yellowknife, NWT. https://www.youtube.com/channel/UCfDRla9E0OmpYMPg1jH2_yw

Current Graduate Students Supervised

Chelsea Meloche (Ph.D.). “What Happens After Repatriation?”

Lia Tarle (Ph.D.) “Shifting Paradigms: Respect, Authenticity, and the Role of Museums in the 21st Century.”

Josh Fontaine (MA) “Archaeological Evidence of Changing Land-Use Patterns and Environmental Degradation on the Salmon River, British Columbia.”

Christian Meier (MA-Heritage Management) “Heritage Issues Affecting the Six Rivers Iroquois.”

Eva Brooke (MA-Heritage Management) “Cultural Heritage Information-Sharing Agreements between First Nations, Government and the Private Sector in Southwestern British Columbia.”

Amelia Stanger (MA-Heritage Management) “The Colville Cultural Landscape: Reconciling Archaeology and Oral Histories on the Upper Columbia River, Oregon.”

Christopher D. Dore, PhD, Registered Professional Archaeologist 10331

Adjunct Professor of Archaeology
Department of Archaeology
Simon Fraser University c_dore@sfu.ca

EDUCATION

2007 M.B.A. Business Administration, University of Arizona, Tucson, U.S.
1996 Ph.D. Anthropology, University of New Mexico, Albuquerque, U.S.
1986 A.M. Anthropology, University of Pennsylvania, Philadelphia, U.S.
1982 B.A. Anthropology, Washington State University, Pullman, U.S.

CURRENT COURSE PORTFOLIO

HRM Business and Management

CURRENT EMPLOYMENT

2013–Current **Consultant, Heritage Business International, L3C**
2016–Current **Adjunct Professor, Department of Archaeology, Simon Fraser University.**
2004–Current **Adjunct Professor, School of Anthropology, University of Arizona.**

RECENT FUNDING FOR RESEARCH & SCHOLARLY PURSUITS (Since 2014)

None

RECENT PEER-REVIEWED CONTRIBUTIONS (Since 2014)

1. Dore, Christopher D. (2018) Business Challenges for the 21st Century: The Next 40 Years of Private Heritage Management. In *Perspectives on Cultural Resource Management*, pp. 229-239, edited by Francis P. McManamon. Routledge, London and New York.
2. Welch, John R.; Burley, David V.; Driver, Jonathan C.; Hogg, Erin A.; Jayasundera, Kanthi; Klassen, Michael; Maxwell, David; Nicholas, George P.; Pivnick, Janet; and Dore, Christopher D. (2018) Digital Bridges Across Disciplinary, Practical and Pedagogical Divides: An Online Professional Master's Program in Heritage Resource Management. *Journal of Archaeology and Education* 2. <https://digitalcommons.library.umaine.edu/jae/vol2/iss2/1>
3. Dore, Christopher D. and Kenneth Aitchison. Business and Marketing (in press). In *The SAS Encyclopedia of Archaeological Sciences*, edited by Sandra L. López Varela. Wiley Blackwell.

CURRENT GRADUATE STUDENT SUPERVISION (Committee Chair)

None

SERVICE RELEVANT TO HRM (Since 2014)

2016–2019 **President/President-elect, Register of Professional Archaeologists. Baltimore, MD, U.S.**

Curriculum Vitae

Christopher D. Dore, RPA 10331

- 2013–2016 Editor, *Advances in Archaeological Practice: A Journal of the Society for American Archaeology*, Society for American Archaeology, Washington, D.C., U.S.
- 2014–2016 Treasurer, Archaeology Southwest, Tucson, AZ., U.S.

AWARDS (Since 2014)

- 2014 Asa T. Hill Memorial Award for outstanding contributions to Plains archaeology, Nebraska State Historical Society, Lincoln, NE., U.S.

David Maxwell, Ph.D.

David Maxwell, Ph.D.

Lecturer, Department of Archaeology, Simon Fraser University

EDUCATION

- 1996 Doctor of Philosophy in Anthropology, October 1996, The University of Arizona, Tucson.
- 1989 Master of Arts, Archaeology, July 1989, Simon Fraser University, Burnaby, British Columbia.
- 1986 Bachelor of Arts, Archaeology, June 1986, Simon Fraser University, Burnaby, British Columbia.

CURRENT COURSE PORTFOLIO

Ancient Peoples and Places
Reconstructing the Human Past
Prehistory of Religion
Archaeology of the New World
Cultural Heritage Management
Maya Archaeology
Archaeological Resource Management
Research Design in Heritage Resource Management

CURRENT EMPLOYMENT

- September 2017 – present: Lecturer, Department of Archaeology, Simon Fraser University, Burnaby, BC
- September 2013 – August 2017: Limited-Term Lecturer, Department of Archaeology, Simon Fraser University, Burnaby, BC
- May 2016 – April 2017: Instructor, Fraser International College, Burnaby, BC

RECENT FUNDING FOR RESEARCH AND SCHOLARLY PURSUITS

2018 GRANT: COURSE DEVELOPMENT GRANT PERIOD: 2018-2019 PROJECT TITLE: Drowning in Garbage? Archaeology, Solid Waste, and Recycling at SFU **Funding:** Teaching & Learning Development Grant **Total: \$6,000 Involvement:** Project Director **Collaboration:** I will oversee the development of a new lab-based undergraduate course in archaeology, designed to study the effects and effectiveness of recycling and waste disposal practices at Simon Fraser University.

David Maxwell, Ph.D.

REVIEWED PUBLICATIONS (SINCE 2014)

1. Maxwell, David, and Jonathan C. Driver (2018) New Approaches to Old Data: Plains Bison Kill Population Dynamics Revisited. In *Large-Scale Manipulation of Prey*. K.C. Carlson and Leland Bement, Editors. University Press of Colorado, Boulder.
2. Welch, John R.; Burley, David V.; Driver, Jonathan C.; Hogg, Erin A.; Jayasundera, Kanthi; Klassen, Michael; Maxwell, David; Nicholas, George P.; Pivnick, Janet; and Dore, Christopher D. (2018) Digital Bridges Across Disciplinary, Practical and Pedagogical Divides: An Online Professional Master's Program in Heritage Resource Management. *Journal of Archaeology and Education* 2. <https://digitalcommons.library.umaine.edu/jae/vol2/iss2/1>
3. Lev-Tov, Justin, Sarah Van Galder, David Maxwell, Seetha Reddy, Thomas Wake, and Kenneth Gobalet (2016) Analysis of Vertebrate Fauna. Pp. 505-560 In *People in a Changing Land. The Archaeology and History of the Ballona in Los Angeles, California. Volume 3: Material Culture and Subsistence Practices*. Edited by Seetha N. Reddy and John G. Douglass. Statistical Research, Inc., Technical Series 94, Tucson, Arizona, Redlands, California.
4. Badenhorst, Shaw, Driver, Jonathan C., and David Maxwell (2016) Pueblo Bonito Fauna. In *The Pueblo Bonito Mounds of Chaco Canyon: Material Culture and Fauna*. Edited by Patricia L. Crown. University of New Mexico Press, Albuquerque.
5. Driver, Jonathan C. and David Maxwell (2013) Interpretation of Death Assemblages of North American Bison Mass Kills: Implications for Understanding Human Predation. *Quaternary International* 297: 100-109.