This season we opened up approximately 40 square meters of the site, with many units excavated to nearly one-meter-deep and a few reaching depths of nearly two meters. One of our major objectives was to expose more building remains in hopes of better defining building construction techniques at Fort Vermillion. The students excavated a building complex roughly near the center of the site (towards the west palisade), parts of which had been previously examined. They uncovered building walls and a building corner that contained a vertical post placed in a pit or trench. The post was squared and grooved to hold the horizontal infill wall logs. It is now clear that at least some of the buildings were built in the early French Canadian post-in-ground construction technique. Detail on the corner post was quite remarkable. The building corner also contained what appears to be a corner fireplace – the first one found at this site, but not an uncommon feature at other fur trade posts. These remains, and other artifacts recovered, show the very strong influence of French Canadians in both fort construction and lifestyle at this remote western Canadian fur trade post.

The students also sectioned a series of depressions west of and outside the fort. These features are not easy to interpret. The students working in this area gained valuable experience in stratigraphic complexity. Broken dressed flat stone fragments and large pieces of metal were among the unique artifacts recovered from these depressions. They are most
likely privy/trash pits that contained a very good sample of faunal remains.

Thanks to the students’ hard work we found another west footer trench (and possible west palisade) approximately seven meters east of the west palisade (found in 2014). This footer trench runs south beneath the buildings with the corner post and fireplace; therefore, it predates these features. The trench’s southern limits were not found during this field season. However, this footer trench continues further north, apparently beyond the first north palisade. Its relationship to the furthest north palisade currently remains a mystery. This is something we hope to explore further next season. The delineation of fort boundaries is of fundamental importance for future decisions regarding unit placement and site sample sizes.

We were able to reach the bottom of a large cellar, used to dump trash, in the northeast area of the site. A large faunal and artifact assemblage was unearthed, including a one-of-a-kind lead tobacco pipe, trade silver, platform pipe fragments, and beads reflecting the earlier NWC occupation rather than the later HBC occupation. This feature, along with others, likely represents the former company store, which according to the HBC records, was dismantled and rebuilt in 1822.

The students also participated in a trampling and flooding experiment just south of the site to see whether distinct cultural layering would hold up in areas of heavy use (i.e. the crew walked down the path every day to and from the excavation site). The results indicate that a flooding episode depositing up to 7 cm of silt on a cultural layer is insufficient to maintain separation of any artifacts on top of it in areas of high activity. These results begin to explain why we might have good stratigraphy in some areas of the site (where little human/animal activity occurs) and virtually nothing in other areas (of high human and animal activity).

We took the students on a field trip to key prehistoric and historic sites in the region on August 6, and had them complete a visual surface survey and shovel testing program along a creek to the east of Fort Vermilion on August 14. Within about a two-hour period they found one or possibly two prehistoric sites (isolated quartzite flake and bone). We also tested two well-formed early river terraces with no positive results. The students were led by project instructors and volunteers very experienced in boreal forest site discovery and testing. They were exposed to the reality of doing archaeology in this sometimes unforgiving boreal forest environment.

We had a photogrammetry team, consisting of Hilary McDonald and Owen Murray, conduct photogrammetry of the site surface features and our excavations. They gave a guest lecture to the students and took their photogrammetry pictures while the students were on-site. The results, which consist of 3-D images of the site and excavations that can be rotated to view the units and site from different perspectives, are quite stunning. Their photogrammetry models have a high potential for a future Fort Vermilion exhibit display at the Royal Alberta Museum.

We are committed to community engagement with the project. We were fortunate that
several volunteers excavated with us and shared our excitement of the history of region. Heinz gave a talk at the seniors’ pot luck in the town of Fort Vermilion in the third week of the project. After that talk, over 100 people came and visited us on site. The site is very remote and only accessible by boat so this number of visitors was very surprising. Plus, we got free vegetables and baked goods from these folks! We also gave tours of the site to visiting professional archaeologists, Chris Robinson (director of the Royal Alberta Museum), and to Marilee (Director of the Fort Vermilion Museum) and Al Toews, who later gave the students a tour of the second HBC fort and the Old Bay House still standing on the site in the present community of Fort Vermilion.

In summary, the 2016 Fort Vermilion excavations were enlightening and productive. The cataloguing and analysis of the cultural remains will now occur over the winter months. Undergraduate students will assist in this work and Joshua Read will focus on the faunal remains recovered from the excavations to complete is graduate research. The excavation report will be submitted to the Archaeological Survey as is required by law by early summer 2017. We also anticipate the submission of academic journal articles shortly thereafter, along with conference and public presentations. It is likely that several of the artifacts unearthed this summer will be displayed at the new Royal Alberta Museum when it opens in December 2017. As our final goal we are actively pursuing funding from the Royal Alberta Museum and support from the National Geographic Society for work next year. We hope to disseminate some of results and the important history of the fur trade through both organizations.