

# Searching For Missing Children: A Guide to Unmarked Graves Investigations

CAA Working Group on Unmarked Graves  
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Canadian Archaeological Association  
Association canadienne d'archéologie

CAA Working Group on Unmarked Graves on behalf of  
the Canadian Archaeological Association

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Edited by Sarah Hazell, Lisa Hodgetts and Edward Eastaugh

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Cover Image

Every Child Matters Orange Shirt in northern Ontario

*Photo Credit: Sarah Hazell*

**The CAA Searching for Missing Children Series consists of:**

- 1. A Guide to Unmarked Grave Investigations**
- 2. A Guide to Ground Search Techniques**

## **Guide Contributors from the CAA Working Group on Unmarked Graves**

Kisha Supernant, Institute of Prairie and Indigenous Archaeology, University of Alberta  
(Chair)

Sarah Beaulieu, University of the Fraser Valley

Adrian Burke, Université de Montréal

Terence Clark, University of Saskatchewan

Steve Daniel, University of British Columbia

Peter Dawson, University of Calgary

Edward Eastaugh, University of Western Ontario

Colin Grier, Washington State University

Scott Hamilton, Lakehead University

Sarah Hazell, University of Western Ontario (CAA Unmarked Graves Project Manager)

Lisa Hodgetts, University of Western Ontario

Andrew Martindale, University of British Columbia

Eric Simons, University of British Columbia

William Wadsworth, University of Alberta

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## 1. Trigger warning

This document may retraumatize or trigger readers because of the highly sensitive content related to the search for unmarked graves of children who attended Indian Residential Schools. Please consider identifying where you will turn for help if needed.



If you are experiencing trauma or feeling triggered, help is available 24/7 for survivors and their families through the **Indian Residential Schools Crisis Line** at **1-866-925-4419**. Mental health support for Indigenous Peoples across the land known as Canada is available through the **Hope for Wellness chatline** at **1-800-721-0066** or using the chat box at <https://hopeforwellness.ca/>. The **Indian Residential Schools Survivors Society** provides information about these and other supports that are available: <https://www.irsss.ca>

## 2. How to use this document

This document provides information for Indigenous communities considering searching for children and others that went missing from Indian Residential Schools (IRS), hospitals, sanatoria, and other institutions. It is the first of two guides produced by the Canadian Archaeological Association's (CAA) Working Group on Unmarked Graves (WGUG). This guide outlines important considerations and potential steps for investigations. A second technical guide covers remote sensing techniques such as LiDAR, Ground Penetrating Radar and Magnetometry. Both guides focus on aspects of investigations where archaeological expertise is most relevant. Topics outside this expertise are not covered in detail (i.e. archival research, forensic investigations, legal or criminal matters). Wherever possible, we include links to organizations or institutions that can offer assistance in these areas.

**Whether and how to investigate remains the choice of communities – who may or may not wish to implement any of the potential steps outlined in this document.**

The CAA WGUG recognizes and supports community led investigations. Communities are welcome to contact us for additional advice or information on topics concerning the search for unmarked graves by emailing: [unmarkedgraves@canadianarchaeology.com](mailto:unmarkedgraves@canadianarchaeology.com). As a group of volunteers, we unfortunately may not be able to meet the demand for support, but we will help in whatever way we can.

This guide begins with an FAQ (Frequently Asked Questions) that provides a quick “go to” summary of major concerns for communities planning investigations.

The remainder of the document provides a guide outlining potential steps and important considerations for investigations, which addresses these questions in more depth.

The companion document to this guide is the CAA’s *Searching for Missing Children: A Guide to Remote Sensing Techniques* which can be found on our website at <https://canadianarchaeology.com/caa/resources-indigenous-communities-considering-investigating-unmarked-graves>. The technical papers in this second guide are written in plain language to aid communities who may wish to use one or more remote sensing methods in their investigation. The technical guide may also be useful to communities evaluating work that was conducted by outside specialists.

### 3. Unmarked Burial Investigations - FAQs

*1. Do Indigenous communities have to conduct investigations for missing children?*

The short answer is no. There are many ways that individuals and communities can choose to memorialize missing children and pursue healing and well-being. Memorialization can happen at any stage of an investigation and can take many forms including ceremony, IRS site visits, and memorial markers, among others.

*2. Should an investigation have predetermined goals?*

Yes, it is important to identify both short and long-term goals for the investigation because they will have an important impact on the timeline and steps of the investigation and the resources that will be needed.

*3. If a community wishes to pursue an unmarked graves investigation, what is the best way to start?*

An important first step is reaching out to mental health professionals and putting supports in place for individuals and family members involved in an investigation. This is heavy emotional work and special care should be taken regarding mental health.

Another important initial step could be to reach out to communities that have survivors who attended the school or institution under investigation. This will help with investigation planning and design, human resource mobilization, and funding applications.

Once these steps are in place, archival research is probably the best place to start looking for missing children.

*4. What are the likely outcomes of conducting an archival investigation of an IRS, sanitorium, hospital, or other institution?*

An archival investigation is a lengthy process that will require many person hours to find documentary/textual evidence to recreate the life history and confirm the death of a missing child or individual. This will be heavy emotional work, but it is the best method for determining the identity and potential burial place of a missing child. The most likely outcome of an archival investigation is that many, but not all, missing children will be identified. It is less likely that the specific grave of any individual will be found, even when combined with remote sensing survey methods.

Archival sources may contain maps or photographs showing the location of cemeteries or burial areas that are no longer visible on the landscape. Grave markers and fences may have decayed or been removed. School registries may indicate unexplained



changes to annual attendance by students. Teachers' reports may indicate punishment/mistreatment of children corresponding to unexplained absences and/or long-term illnesses. Infirmary/hospital records, medical supply inventories, or doctors' records may also provide important clues about student attendance/absence or injuries that demonstrate mistreatment. These types of records, among many other documents, will be important in recreating the life history and death of a missing child.

*5. What is remote sensing?*

Remote sensing is the science of obtaining information about objects or areas from a distance. It includes airborne (e.g., drone or satellite) and ground-based (e.g., ground-penetrating radar) approaches. The most common techniques used in grave detection are ground-based, in a discipline known as geophysics.

*6. Is it necessary to conduct Ground Penetrating Radar or other types of remote sensing/geophysical survey (often called a **ground search**)?*

No. As the Truth and Reconciliation Commission reported in 2015, and as all survivors and their families know, there are many missing children located across the country at former Indian Residential Schools and in other school contexts. There are also missing loved ones who were sent away for medical treatment and never returned. Geophysical survey is only necessary should Indigenous communities wish to more precisely identify the locations of unmarked graves in order to protect and memorialize these areas or to conduct further investigations. It may also be useful if a community is considering legal action or wants to establish criminal liability. The decision to conduct remote sensing rests entirely with communities.

## 4. A Guide for Pursuing Unmarked Grave Investigations at Indian Residential Schools (IRS) and other Institutions

The Canadian Archaeological Association established a Working Group on Unmarked Graves to provide information to communities searching for missing children and individuals. This guide provides general information on how a community might begin an investigation, as well as outlining potential components of a search for missing children. It is meant to be a living document and will be updated regularly as we develop further guidance based on emerging situations. We are also developing additional archaeological and remote sensing training materials. We welcome feedback from communities, which can be sent to: [unmarkedgraves@canadianarchaeology.com](mailto:unmarkedgraves@canadianarchaeology.com). We have also produced technical guidance on remote sensing methods relevant to these investigations. It can be found on the CAA website ([Resources for Indigenous Communities Considering Investigating Unmarked Graves | Canadian Archaeological Association / Association canadienne d'archéologie \(canadianarchaeology.com\)](https://canadianarchaeology.com/resources-for-indigenous-communities-considering-investigating-unmarked-graves/)).

This guide lays out potential pathways for communities pursuing or thinking about conducting Unmarked Graves Investigations associated with Indian Residential Schools (IRS), sanatoria, hospitals, and/or other institutions. It is not a template for deliverables or costing, but rather a guide to a series of steps for this highly sensitive and complex task.

We propose several important considerations in searches for unmarked graves of missing children, which are informed by Calls to Actions 71-76 of the Final Report of the Truth and Reconciliation Commission and the experiences and knowledge of members of the CAA's WGUG:

- Any work to locate missing Indigenous children must be led and directed by Indigenous communities. Indigenous communities should be supported to build capacity to do the work themselves without having to rely on outside experts, if they so choose.
- The application of remote sensing is not necessary to know the devastating truth of the existence of unmarked graves of missing children in Canada and at specific residential school locations. Remote sensing methods can **sometimes** reveal specific locations of unmarked graves. However, remote sensing cannot locate all children who died at or went missing from residential schools.
- Remote sensing is a potential tool for finding missing children, but it should not be considered the first stage of any investigation. Several phases should be considered first, including but not limited to community(s) meetings and investigation planning, archival research, and survivor interviews. These will provide direction and potentially reveal important information about the location

of unmarked graves. Every investigation will be different because of many variables including the number of communities involved, environmental factors, and financial support. We encourage communities to include the stages or steps that make the most sense for their situation.

- Remote sensing cannot provide 100% assurance of the presence or absence of a specific grave. It can provide a range of confidence in grave identification depending on the context. Most remote sensing of graves has been undertaken in formal cemetery contexts so locating unmarked graves of children may be complicated by different types of graves, burial paraphernalia (i.e. casket, shroud/covering, or clothing) and their smaller size. Further refinement of remote sensing techniques is needed to improve the application of these techniques to unmarked burials. The CAA Working Group on Unmarked Graves has developed technical guidance on these issues and is working to refine their use.

## 4.1 Potential Investigation Components

The following are steps that we suggest communities consider if they are thinking about pursuing or are now conducting unmarked graves investigations. At every stage, decisions to proceed with further work rest solely with the Indigenous community(s) involved. This document does not replace the need for contracts/agreements with deliverables, costs, investigation design, training, and data sharing agreements. The Institute of Prairie and Indigenous Archaeology (IPIA) also has suggestions about how to proceed [here](#).

This document is complemented by our companion videos series on Investigation Planning located on our website at <https://canadianarchaeology.com/caa/resources-indigenous-communities-considering-investigating-unmarked-graves>.

### 4.1.1 Wellbeing Supports

Efforts to locate missing children are likely to re-traumatize residential school survivors, their families, and communities. Supports must be in place in advance of such work. The community initiating an investigation should mobilize mental health resources at the outset.

- Spiritual, emotional, mental health, and physical support for individual and community well-being should be in place.
- Potential community ceremony/healing practices and events should be established.
- Continuing and ongoing support for community and survey teams will likely be needed.
- Taking time to care for oneself, family, and community members during this process will be important for overall wellness.

#### 4.1.2 Community(s) Investigation Members and Planning

The effort to locate missing children must be Indigenous-led and should follow the permissions and protocols of Indigenous communities. It is not necessary to include all of the following considerations, but they may prove helpful in determining with whom and how to move forward:

- The community(s) initiating investigation planning should consider involving investigation members from all the Indigenous groups that could be represented in the burials. The TRC recommends that the community most impacted by an IRS should take the lead, and all communities with children who died or went missing from each school be involved in decision making.
- Once the investigation members have been agreed upon, it is important for the group to develop an Investigation Plan (IP) based on their communal goals. This will help guide information collection and analysis (what kinds and how much), the human and financial resources needed, internal and external communications strategy, milestones and timelines, deliverables, and final reporting. The IP will also include contracts or agreements specific to each community addressing who will be charge of specific roles, coordination, and tasks.
- Data agreements and data management principles should be agreed upon including data sharing and protection that will be mutually beneficial to the communities involved. Such agreements should follow [OCAP principles](#).
- Indigenous cultural protocols should direct outreach, permissions, introductions, and ceremonies.
- At this stage it is also important for communities to consider whether they wish to pursue legal action based on their unmarked graves investigations, because this can shape decisions about data collection and interpretation (i.e. for evidence to stand up in court).
- It is important to recognize that investigations involve many lines of evidence and that investigations will take time. Investing time in initial planning can help to streamline this complex process.
- Training for community members to understand remote sensing techniques is important. Basic knowledge of these techniques will help investigation members vet the capabilities of contractors and better interpret results. More advanced knowledge could allow them to conduct remote sensing surveys themselves.

- GPR has received a lot of media attention. It is important for communities and investigation members to understand that GPR survey is most effective when guided by survivors' accounts and archival research. It requires a highly technical and time-consuming process of analysis and interpretation (see GPR FAQ's in the Technical Guide). It takes a few weeks to learn to collect GPR data, much longer to learn to process it, and years to learn to interpret it.
- Conducting remote sensing to identify unmarked graves is a significant step in the search for missing children. When planning remote sensing survey communities may wish to consider what the next steps would be if graves are found (e.g. memorialization, protection, biological testing, removal, reinterment) as this can shape the survey strategy.

### 4.1.3 Financial Support and Considerations

Conducting an investigation of unmarked graves will require significant financial resources. While some costs may be covered by *pro bono* work from industry specialists and other organizations like the CAA and universities, additional resources, equipment, and expertise will be required. Many variables influence the process of launching an investigation, including the number of communities involved and the existing capacity and resources of a community, among others. This means that communities Canada-wide are at different stages of the investigation process.

For an overview of the latest available funding, please visit the website of the National Advisory Committee on Residential Schools Missing Children and Unmarked Burials at <https://nac-cnn.ca>.

### 4.1.4 Archival Research

In many cases, the most valuable information concerning unmarked graves will come from archival sources and archival research should be considered an important line of inquiry in missing children investigations. This work can be time consuming and disturbing for the team members who carry it out.

Information on the location of missing children exists in archival records including those held by communities, by the TRC, and by governments, churches and local organizations/institutions. Recently, more documents have been transferred to the TRC and more are forthcoming. Communities are encouraged to seek archival data from all relevant sources. Some organizations that hold relevant information have not released it to communities and it is important that they do so immediately.

Archival research is a complex endeavor. The National Center for Truth and Reconciliation (NCTR) is developing a more detailed guide for this work including collection, analysis, and long-term safe storage of archival documents like school

records. Below are some suggestions about what kinds of archival research communities can do to get started.

- Collection of IRS or institutional building plans and/or maps
- Compiling relevant photos of children and IRS grounds
- Cross-referencing different types of school records with infirmary or hospital records
- Band membership lists and/or annuity lists
- Federal public records for census, birth, marriage, and death (<https://www.bac-lac.gc.ca/eng/census/Pages/census.aspx>)
- Provincial/territorial archives
- Newspapers and libraries
- Individual collections (ethnohistorians/anthropologists)
- Museums - old maps, recordings, belongings
- Historical societies may have collections
- Medical records - may be in national collections, or could be in provincial records if transferred for care
- Local government records (information about property/infrastructure/maps/landscapes)
- Military records (lands-based information)

In addition to reviewing records in these and other collections, it will be important to development secure and accessible archives following OCAP principles and to implement long-term storage plans for archival records and data as well as emergent information.

#### 4.1.5 Community/Survivor Knowledge

Some survivors have knowledge of the location of missing children. Recalling this information can be deeply traumatizing. Where survivors are willing to provide further testimony and documentation, such as developed by the NTRC, survivor well-being must take precedence over any potential information gathering. Only with the consent of the willing survivor(s) can knowledge be documented. If consent is obtained, some potential considerations include:

- Identifying the location of missing children through survivor testimony.
- Providing survivors and their families with necessary supports.
- Develop and implement appropriate recording protocols.

The Institute of Prairie and Indigenous Archaeology has produced a useful [guide for collecting oral histories](#).

#### 4.1.6 Working with non-Indigenous Specialists

Some non-Indigenous specialists (e.g. from industry or universities) involved in supporting investigations may have longstanding relationships with Indigenous communities. For others, it may be the first time they are working with Indigenous groups and individuals. Because of the highly sensitive nature of unmarked burial investigations, protocols should be put in place to protect Indigenous investigators, collaborators, and survivors from potentially negative language or interactions, even if unintentional. As suggested in the TRC's Call to Action # 57, this can take the form of skills-based learning for intercultural competency and Indigenous awareness and sensitivity training. It is especially important for non-Indigenous specialists to understand that any work taking place at an IRS should be approached in a culturally sensitive manner as directed by communities so that proper attention to ceremony and offerings can be observed. The protection of information and data is another important consideration when working with non-Indigenous specialists and formal agreements should outline how the information maybe be used and stored.

- Intercultural competency and Indigenous awareness and sensitivity training should be a priority for organizations and specialists that have not worked extensively with Indigenous groups.
- Survey teams should be trained in community protocols.
- Data management principles should be agreed upon and data agreements put in place.

#### 4.1.7 Spatial/Local Database Development

The location of missing children involves the compilation and analysis of spatial data. A secure and formal system of archiving and analysing a wide range of evidence (e.g. documents, survivor testimony, maps, photographs, geophysical survey data) must be developed. Such work is commonly done using a Geographical Information System (GIS) platform, like ArcGIS Pro (Esri), which can facilitate:

- Development of a culturally-appropriate spatial archive and analytical platform such as a GIS.
- Compilation of archival and survivor knowledge into a spatial frame.
- Assessment of landscapes for likely locations of missing children.

For more detailed information, please consult the CAA's *Searching for Missing Children: A Guide to Remote Sensing Techniques*, available on our [website](#).

#### 4.1.8 Area Mapping and Preparation

Investigation of landscapes where missing children might be buried is complicated. Many areas have changed over time, so information about the history of land use, geology, and development is needed. Mapping is an important step in documenting the

area before any potential remote sensing. Ground preparation may also be needed in advance of remote sensing. Suggested steps include:

- Mapping of geological conditions because this can influence the location of missing children and choice remote sensing methods.
- Compilation of recorded impacts such as construction, prior archaeological work, and other landscape modifications.
- Creation of a detailed surface topographic base map of the residential school landscape. We recommend the use of Unmanned Aerial Vehicle (drone) with a Light Detection and Ranging (LiDAR) sensor to create a digital elevation model (DEM) of the current landscape. Burial locations can include surface contour patterns that are visible in high resolution DEMs.
- Walkover survey by the entire research team, including survivors if they wish, to approach the land in a culturally respectful manner, gain familiarity with the physical landscape and the former layout of buildings and other features, and work with communities to select priority locations for remote sensing. Ceremonial protocols may be important at this stage.
- Location preparation, which may include removal of obstacles and clearing of vegetation in areas identified for remote sensing investigation. Care should be taken to avoid removing evidence of old grave markers that might remain hidden in the vegetation.

#### 4.1.9 Remote Sensing Fieldwork

Ground-penetrating radar (GPR) is well-established as a reliable method for the identification of burials in cemeteries. Other applicable methods include magnetic and electrical resistance instruments. Remote sensing is most effective when multiple techniques are applied over the same area. Remote sensing approaches typically proceed in two steps: 1) prospection (the initial assessment using a wide-area approach to identify potential areas of interest) and 2) investigation (detailed study of high potential areas, usually via rectangular grids). Local ceremonial protocols should be observed when conducting any such work. Remote sensing techniques are covered in more detail in *Searching for Missing Children: A Guide to Remote Sensing Techniques*, available on our [website](#).

#### 4.1.10 Communication of Remote Sensing Investigation Results

Regardless of who conducts the remote sensing work, the communication of results should proceed with extreme caution. There has been considerable misinformation and miscommunication in the media about many of the searches to date. Releasing results before clear communication plans are in place can lead to further misinformation. It is an undeniable fact that children died and went missing from IRSes. Communities are not obliged to disclose the number of potential burials found during an investigation. If a community chooses to make their investigation findings public, it is often best to wait



until the final report is submitted rather than releasing preliminary findings. Suggestions about reporting final results include:

- Final report submission should take place at the completion of all field work in a specific location.
- Reports should be written in accessible language.
- Reports should include a summary of preparatory work, prior evidence, survey design, data collection parameters, an assessment of the relevant characteristics of the landscape, interpretive logic, taxonomy of identified anomalies, evaluation of confidence, and a complete inventory of all anomalies.
- Reports should include maps of the locations of anomalies, but communities might wish to keep this information confidential.
- Reporting should also include a presentation to the community, with well-being supports in place, of the final report results in accessible language.

#### 4.1.11 Memorialization

As outlined in Calls to Action 74-76 of the TRC, the location of missing Indigenous children who died as a result of Canada's Indian Residential School system should be appropriately memorialized according to the wishes of the communities whose children may be buried in these locations. Memorialization can take many forms including, but not limited to, ceremony, dedications, and IRS graves site demolition or preservation.

## 4.2 Potential Additional Steps

### 4.2.1 Excavation and Forensic Work

Some communities may wish to confirm the identification of burials using excavation. Some may also wish to exhume missing children for identification and appropriate reburial. Other communities may not wish to take such steps. These decisions rest entirely with the affected communities. Moving forward with excavation and/or exhumation can be a difficult process. Children at each school were taken from multiple communities, and not all of those communities may wish to proceed in the same way. It is not possible to determine who is in an unmarked grave and therefore which community they are associated with, without further examination, including but not limited to DNA analysis.

The excavation and recovery of human remains requires consideration of both heritage and medico-legal legislation and policy by province or territory. In most cases, a forensic anthropologist (an anthropologist with specialized criminal training) is required because there are potential legal implications in such work. Forensic anthropological work and the analysis of the skeletal remains of individuals is a complex endeavor. The Canadian Association for Biological Anthropology (CABA) has created a document that outlines [potential next steps when unmarked burials are found](#).

Possible options for communities to consider include:

- Near-surface excavation of potential unmarked graves found using remote sensing can reveal the grave shaft without disturbing the ancestral remains. In this case, the individual is not seen or removed, the soil is replaced and the grave location can be confirmed on a map.
- Individuals can be exhumed to permit forensic anthropological analysis. Such work can have implications in criminal investigations and will fall under the relevant provincial/territorial laws/policies.
- If individuals can be identified, either through a grave marker or DNA analysis, it may be possible to return missing children to their home communities for reburial in a culturally appropriate manner. Communities should be aware, however, that DNA analysis will require many community members to voluntarily provide samples for comparison to deceased individuals. This comes with another complex set of potential legal and ethical considerations. There is also no guarantee that this type of analysis will result in the positive identification of individual missing children.

## 5. Additional Resources

The National Advisory Committee on Residential Schools Missing Children and Unmarked Burials also has pulled together many helpful resources to support missing children investigations on their [website](#) including an [Overview on Navigating the Search for Missing Children and Unmarked Burials](#).

The Institute for Prairie and Indigenous Archaeology at the University of Alberta has produced a series of helpful resources for investigation planning and the application of geophysical techniques in unmarked graves investigations. Follow the link below to access some of them.

[Institute for Prairie and Indigenous Archaeology – Community Resources](#)

The British Columbia Technical Working Group on Missing Children and Unmarked Burials have developed one-page summaries on key technical issues to help those involved in ground searches for missing children. To access these one-pagers, please use the link below.

[British Columbia's Technical Guidance for Communities](#)

We will continue to update these links as new resources become available.