YUKON NORTH SLOPE
BASELINE ECOLOGICAL AND CULTURAL
CONSERVATION ASSESSMENT

DISPLAY AND QUERY OF MAPPED TRADITIONAL KNOWLEDGE OF FISH AND WILDLIFE HABITAT

MAP ATLAS USER GUIDE
VERSION 1

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PREPARED FOR
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Contents

Introduction

Inuvialuit traditional knowledge research of the seasonal habitat requirements of key fish and wildlife species on the Yukon North Slope was completed in 2016[1]. The research included a series of interviews, with mapping of areas in support of the verbal descriptions of fish and wildlife important habitats and places. While the research primarily focused on verbal descriptions of seasonal habitats for selected key fish and wildlife, some mapping was also undertaken by many interviewees to further identify or explain habitat relations (Figure 1).

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[1] Wildlife Management Advisory Council (North Slope) and Aklavik Hunters and Trappers Committee. 2018. Inuvialuit Traditional Knowledge of Wildlife Habitat, Yukon North Slope. Wildlife Management Advisory Council (North Slope), Whitehorse, Yukon. vi + 74 pp.
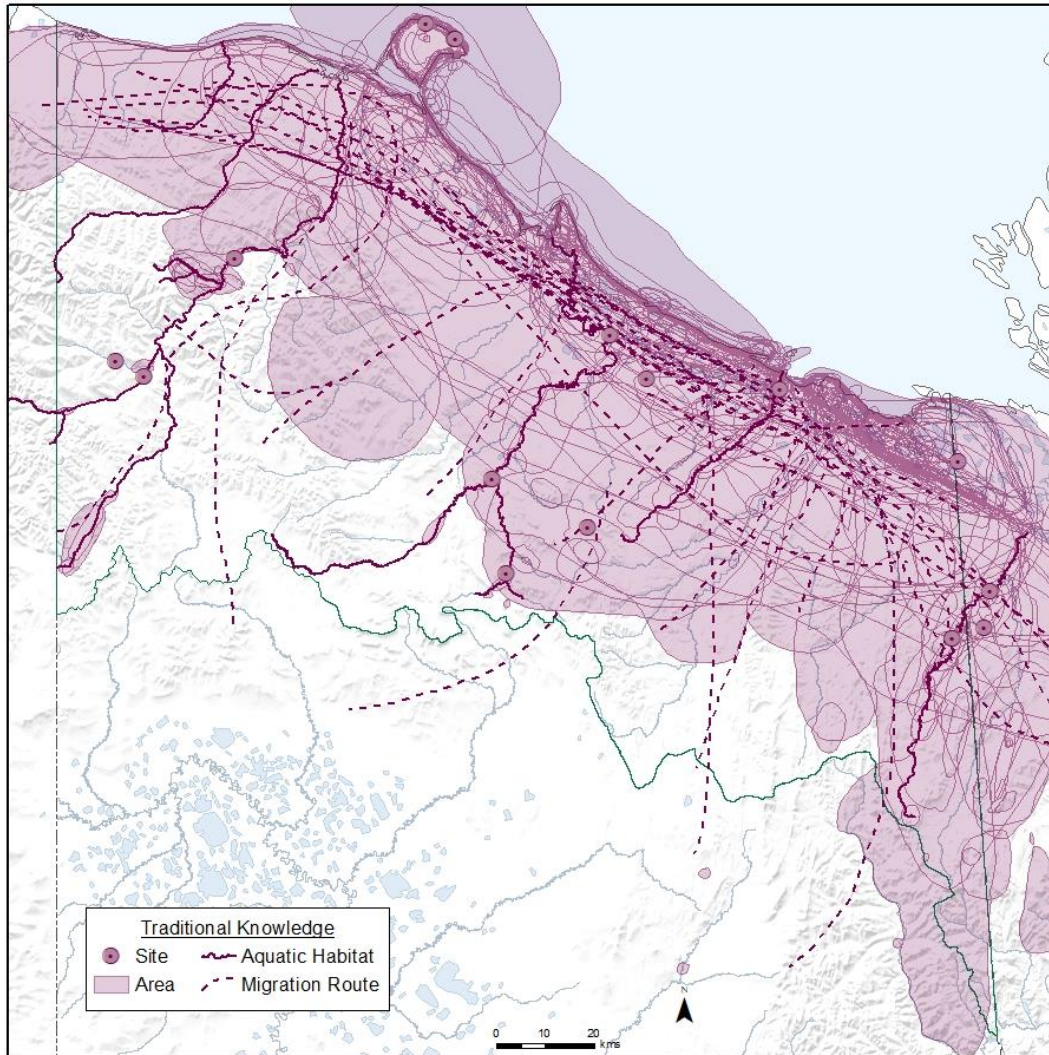
Figure 1. Some interviewees provided mapped information in support of their verbal descriptions of fish and wildlife seasonal habitats as part of the TK research on the Yukon North Slope; shown here is all mapped information across all species combined.

This document describes how users of the YNS Map Atlas may interact and query the mapped traditional knowledge of fish and wildlife habitat to obtain important context of the mapped information, including the question that prompted the mapping as well as any spoken responses describing the important or relevance of the mapped information. It assumes an initial familiarity with the GeoPDF product and interface. If necessary, please refer to Map Atlas User Guide and Documentation, version 1 (April 2020) for information on basic and advanced functionality of GeoPDFs.

Traditional Knowledge in the Map Atlas

All mapped information digitized from interviews in the Traditional Knowledge study will be included in a dedicated map focused solely on Traditional Knowledge (similar to the Traditional Use map produced in version 1 of the Map Atlas). For species-specific maps (moose, caribou, grizzly bear, etc.), of subset of the traditional knowledge data pertaining to each species will be displayed in order to capture the

diversity of seasons, descriptions, spatial extent, and respondents for each species documented in the Traditional Knowledge study. In this example, we will look at Traditional Knowledge in the context of the Moose map.

Layer Visibility

In the final version of the Moose map, all layers other than base layers will be turned off upon opening the GeoPDF (similar to the presentation in version 1 of the Map Atlas). However, in this example version, the Traditional Knowledge data is turned on by default as it is the focus of discussion. Other layers can be turned on and off in the layers panel (Figure 2).
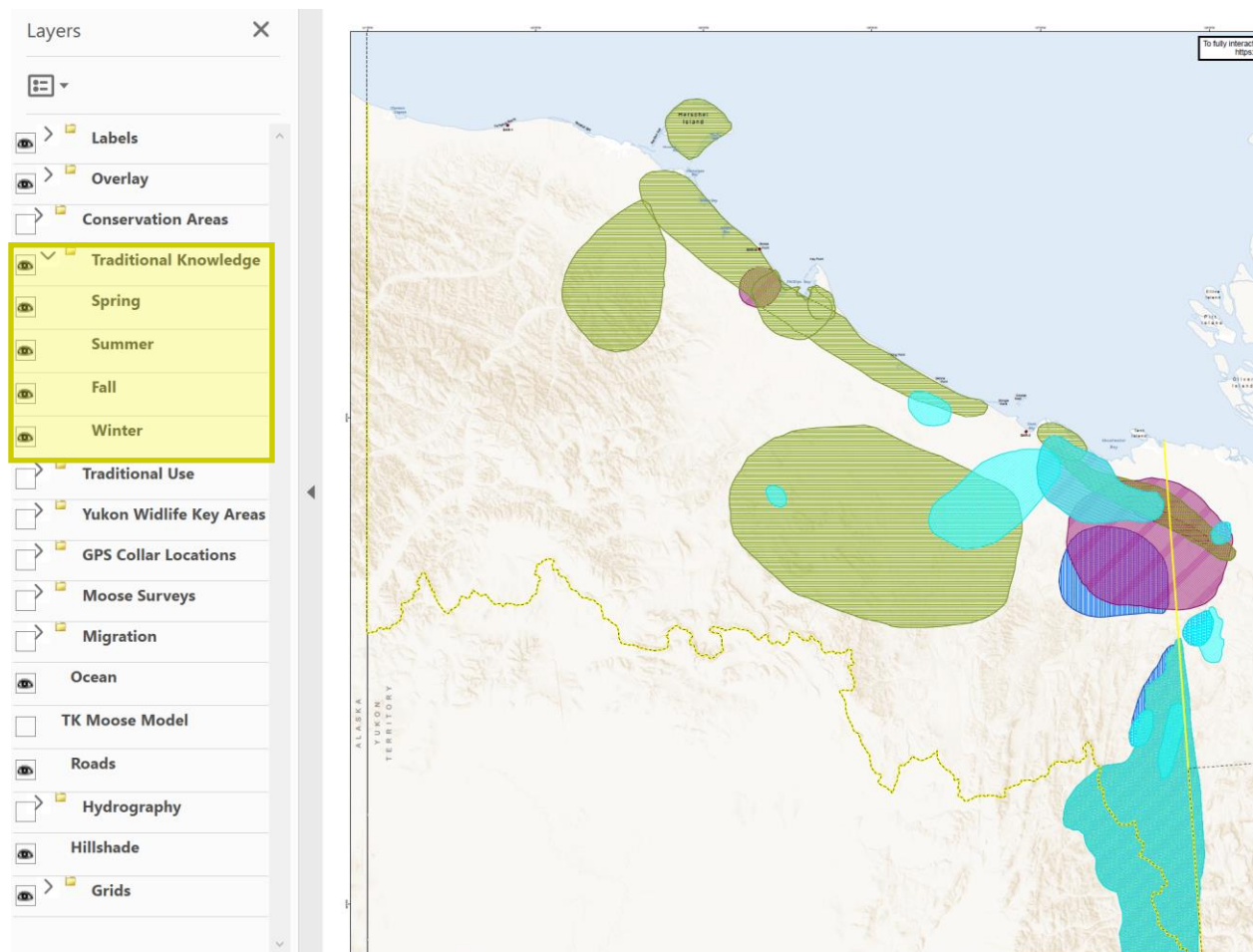

Figure 2. Visibility of Traditional Knowledge layers

Traditional Knowledge data are organized by season. All seasons of Traditional Knowledge data are shown by default but individual seasons can be turned on and off in the layers panel. Features that were attributed by the respondent to more than one season appear in all applicable seasons, so some polygons are duplicated between seasons.

Accessing Spatial Data Attributes

Each polygon on the map has a series of attributes associated with it – polygon ID [Name], season, behaviour, respondent ID [PIN], question(s) asked in interview, summary of the response, and a note indicating if more information about the polygon is available in the supplemental documentation (for details on supplemental documentation, see next section, Accessing Stories).

Attributes are stored as Object Data, a native functionality of Adobe Reader that allows the attributes to be accessed without the supplemental TerraGo Toolbar. To access Object Data, right-click anywhere on the map and select "Object Data Tool" from the drop-down menu (last entry in list). Once in Object Data mode, when the cursor is moved over the map, it will turn into a crosshairs when placed over a polygon for which there are embedded attributes. Clicking on a polygon will bring up the Model Tree panel in a window to the left of the map (Figure 3).
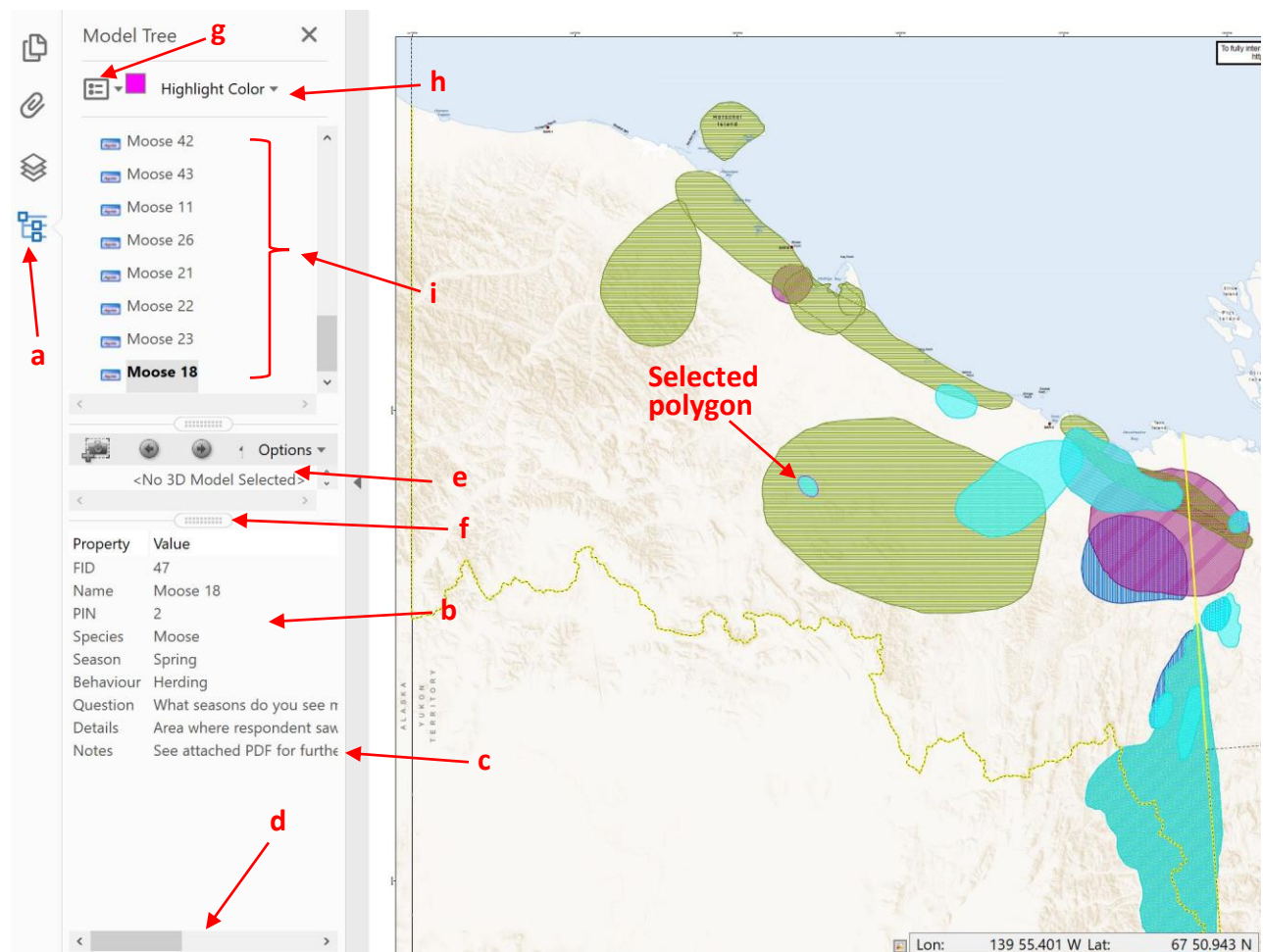

Figure 3. Model Tree panel with object data attributes

The Model Tree panel contains several components, described below and referenced by the letters in Figure 3.

a) Model Tree access – the Model Tree panel can be accessed by clicking this icon, even if no feature is selected on the map with the Object Data tool.

b) Object Data pane – this pane displays all the attribute data available for a selected feature. Each attribute is on a separate line with no internal line breaks, so it is often necessary to scroll over using the slider at the bottom of the pane (d) in order to read all the information. If there is additional information or stories about a particular feature, it will be noted in the "Notes" attribute (c). This information can be accessed by following the steps in the next section, Accessing Stories.

e) View pane – this pane is not relevant to interacting with the Map Atlas, so it is suggested that users minimize this pane using the drag-up slider (f) in order to maximize the information displayed in the Object Data pane below

g) Menu – this drop-down menu contains a number of ways to interact with the attributed data, including Zoom to, which zooms to whatever polygon is selected, and Search, which allows users to search attributes for key words (i.e. "Herschel", "coast", etc.)

h) Highlight color – this allows the user to change the color highlighting a selected polygon (the highlighting is subtle and there is no way to change its thickness)

i) Structure pane – this pane provides a list of all features in the map for which there are attributes. Polygons present in more than one season will appear more than once in this list. Users can select polygons by clicking on them in this pane, and the attributes for the selected polygon will appear in the lower [Object Data] pane.

Note when selecting polygons on the map: Only the polygon on top will be selected, but polygons are symbolized with smaller ones on top of larger, so it should be possible to find a piece of each polygon that is not underneath another to select.

Accessing Stories

The majority of information gathered in the TK interviews does not fit neatly into spatial data format. In order to capture the breadth and depth of knowledge documented in the interviews, a separate document was created to hold stories and quotes from elders. This document, as well as other supplemental documents, can be accessed via the Attachments feature in Adobe Reader (Figure 4).
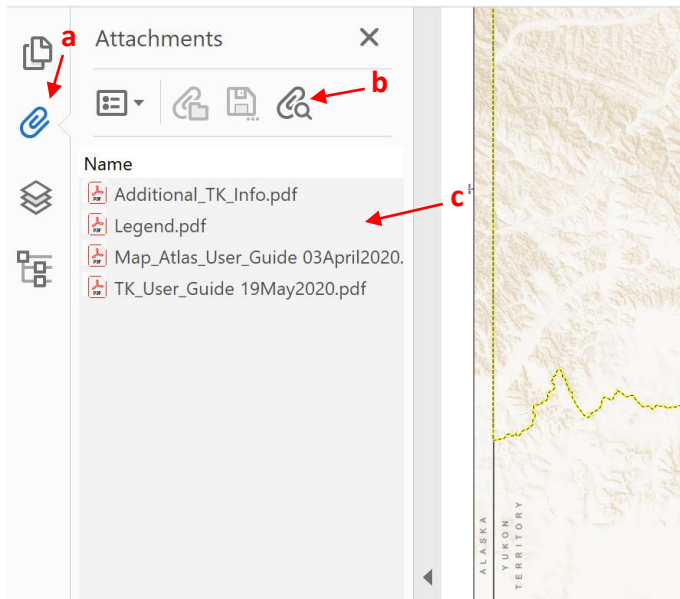
Figure 4. Attachments panel displaying all documents associated with the map

The Attachments panel contains several components, described below and referenced by the letters in Figure 4.

a) Attachments access – all attachments can be accessed by clicking this icon, which will open the Attachments panel to the left of the map.

b) Search Attachments – this function allows users to link features on the map to stories in the supplemental documentation. Clicking this icon will bring up the Search window. In order to access additional information about a feature, type in the "Name" attribute of the feature of interest and click "Search Attachments" (Figure 5). Adobe will search for the name in all attachments and bring up a list of the results. Results are grouped by attachments first, then listed by embedded attributes below the results in the attachments. The document containing the stories and other details about a polygon is called "Additional_TK_Info" (Figure 6). Click the caret next to the document name to expand the results within the document (Figure 7). Click on a matching entry, and the attachment will open in a separate tab to the exact location of the reference (Figure 8).
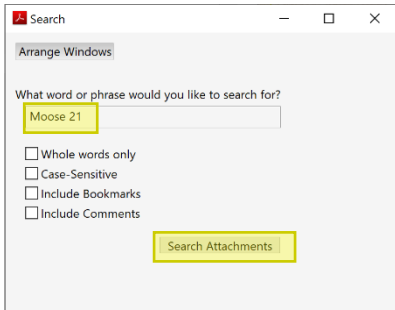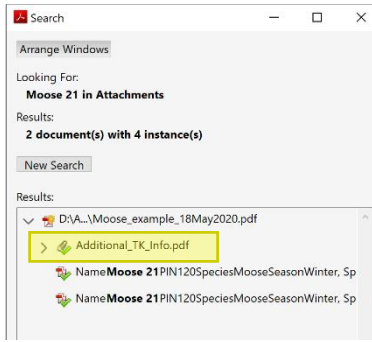
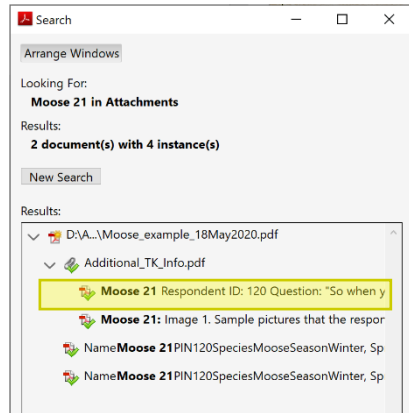*Figure 5. Search window*

Figure 6. List of results

Figure 5. Matching entry in Additional Info doc

Moose 21

Respondent ID: 120

Question: "So when you're seeing moose in the wintertime, what does the habitat look like? Like, what's the land look like where you find them?"

Additional detailed response:

Respondent: In the late winter, late winter to early spring, there's a place in Big Fish and Little Fish River. One year we seen, what was it... 190 some moose.

Interviewer: Really?

Respondent: In one day, yeah.

Interviewer: So, other people have been telling me about them bunching up like that, too. Where is that out here?

Respondent: Okay, so the Little Fish, here, and then around down in this area between the forks, where it connects to... from Big Fish to Little Fish.

Interviewer: Right between the forks?

Respondent: Yep.

Interviewer: ...What did the habitat look like? Was it like a valley, was it mountainous?

Respondent: Well, yeah, it was mountainous with... like on one side there was some trees, not much trees, but also there was... on the other side of the river, of the Little Fish, was a long slope with like more of a tundra tussock area...

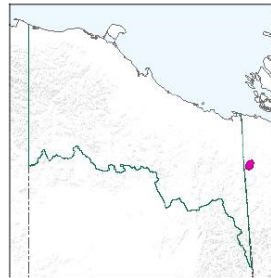And down into the riverbed was a lot of shrubs and willows.

Figure 6. Additional interview info related to a specific feature on the map

c) This window provides a list of all attachments embedded in the map. Double clicking on any attachment will open it in a new tab in Adobe Reader. This feature is also useful for keeping the legend open in a separate tab while scrolling around zoomed into the map in another.