



# Polar Bear Expedition Digital Collections

Elizabeth Yakel  
Associate Professor  
School of Information



BENTLEY HISTORICAL LIBRARY  
THE UNIVERSITY OF MICHIGAN



SCHOOL OF INFORMATION  
UNIVERSITY OF MICHIGAN



- ◆ Home
- ◆ Contact us
- ◆ About this site
- ◆ FAQ

## Polar Bear Expedition Digital Collections

Search

  
  
[advanced search](#)

- Browse by
- ◆ collections
  - ◆ individual names
  - ◆ geographic locations
  - ◆ military units
  - ◆ organizations
  - ◆ media types
  - ◆ subjects

Login

Username:

Password:

remember me

- ◆ [Forgot your password?](#)
- ◆ [Create a new account](#)

The "American Intervention in Northern Russia, 1918-1919," nicknamed the "Polar Bear Expedition," was a U.S. military intervention in northern Russia at the end of World War I. Since many of these soldiers originated from Michigan, the [Bentley Historical Library](#) at the [University of Michigan](#), an archive documenting Michigan history, has collected materials related to this event since the 1960s. The Bentley has amassed one of the largest groups of materials on this topic, consisting of over sixty individual collections of primary source material as well as numerous published materials.



In 2004, the Bentley proposed a project to digitize all of the Polar Bear materials in order to increase access as well as protect and secure the fragile originals. In 2005, faculty and students from the [University of Michigan School of Information](#) began a [research project](#) investigating next generation [finding aids](#). The Polar Bear Expedition Digital Collections are the first example of rethinking traditional archival finding aids to provide better access to primary sources on the web. We are experimenting with different ideas for displaying archival content as well as implementing added functions so that researchers can interact with online collections using collaborative tools. ([read more...](#))

There are several ways to begin your own expedition into the Polar Bear Collections:

- ◆ read a [brief history](#) of the Polar Bear Expedition.
- ◆ [search](#) for items about a person, place or Army unit
- ◆ browse lists of [photographs](#), [maps](#) or [diaries](#) from the Collections
- ◆ browse an [alphabetical list of collections](#), most of which bear an individual's name
- ◆ browse a [list of all known participants](#) of the Polar Bear Expedition

**What's new?**

- \* Search by item.
- \* [Audio](#) from [Salchow Interview](#) available.
- \* Bookmark individual items

# Our Team

- SI doctoral student
  - Magia Ghetu
- SI master's students
  - James Sweeney
  - Seth Shaw
  - Christie Peterson
  - Andrew Bangert
  - Ricah Marquez
  - Dharma Akmon
  - Jeremy York
- Bentley Historical Library staff
  - Polly Reynolds
  - Leonard Coombs
  - Greg Kinney
  - Bill Wallach
  - Fran Blouin
  - Ann Flowers
  - Karen Jania
  - Brian Williams



# Who are the Polar Bears?

- American intervention in Northern Russia, 1918-1919
- Michigan men heavily represented
- Bentley Historical Library has over sixty collections:  
Diaries, maps, oral history, photographs, motion picture
  - Group of smaller collections, but usually referred to as one collection
  - Complete digitization of all collections, 2004
- Integration of digitized collections with finding aids and extensive database
- Diverse user community: researchers, genealogists, historians, students
- <http://polarbears.si.umich.edu>



# Research question:

- Can online communities be constructed around archival and manuscript collections?
  - Will existing communities be attracted to online venues?
- How will visitors interact in the context of online archives and finding aids?



# Polar Bear Expedition Site Features

- Information architecture
  - Cascading style sheets
  - Search
  - Browse
  - Bookmarks
- Social navigation
  - User profiles / awareness
  - Comments
  - Link paths (collaborative filtering)



# Polar Bear Expedition Site Content

## ■ Reuse

- Encoded archival description finding aids
- MARC records (subject headings)
- Filemaker Pro database of 6100+ soldiers who participated in the event
- 12,000+ digital images of all items in the 64 collections
- 3000+ digital images of published books and journals (not quite mounted)
- <http://polarbears.si.umich.edu>



# Methods

- Survey (years 1 and 2)
- Interviews
- Web analytics
- Content analysis





# Who are our visitors?

- User profiles (as of February 2007)
  - 221 individuals formally registered
  - 19 people (9%) completed user profiles.
    - 13 have a family connection to the materials.
    - 4 are interested in the history of the event or the time period
    - 2 provided no information about their interests in their profile



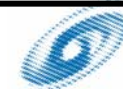
# Where do they come from?

- 70% of visitors from the US
- 15% of U.S. visitors from Michigan)
- 30 visits from Archangel, Russia where the military intervention took place.



# Where people come from

<b>Rank</b>	<b>Country / State or City</b>	<b>Number of Visits</b>	<b>Page Views per Visit</b>
<b>1</b>	<b>United States / Michigan</b>	<b>16527 / 2620</b>	<b>4.88 / 9.7</b>
<b>2</b>	<b>Canada</b>	<b>1855</b>	<b>3.42</b>
<b>3</b>	<b>United Kingdom</b>	<b>1064</b>	<b>3.11</b>
<b>4</b>	<b>Russian Federation / Arkhangel'sk</b>	<b>939 / 97</b>	<b>11.18 / 38.14</b>



# Referrals: Getting to the Site

Rank	Source [Medium]	Visits
1	google	16223
2	Direct (polarbears.si.umich.edu)	1861
5	en.wikipedia.org	425
6	bentley.umich.edu	402
10	ipl.org	267
26	pbma.grobbel.org	39
43	mirlyn.lib.umich.edu	13



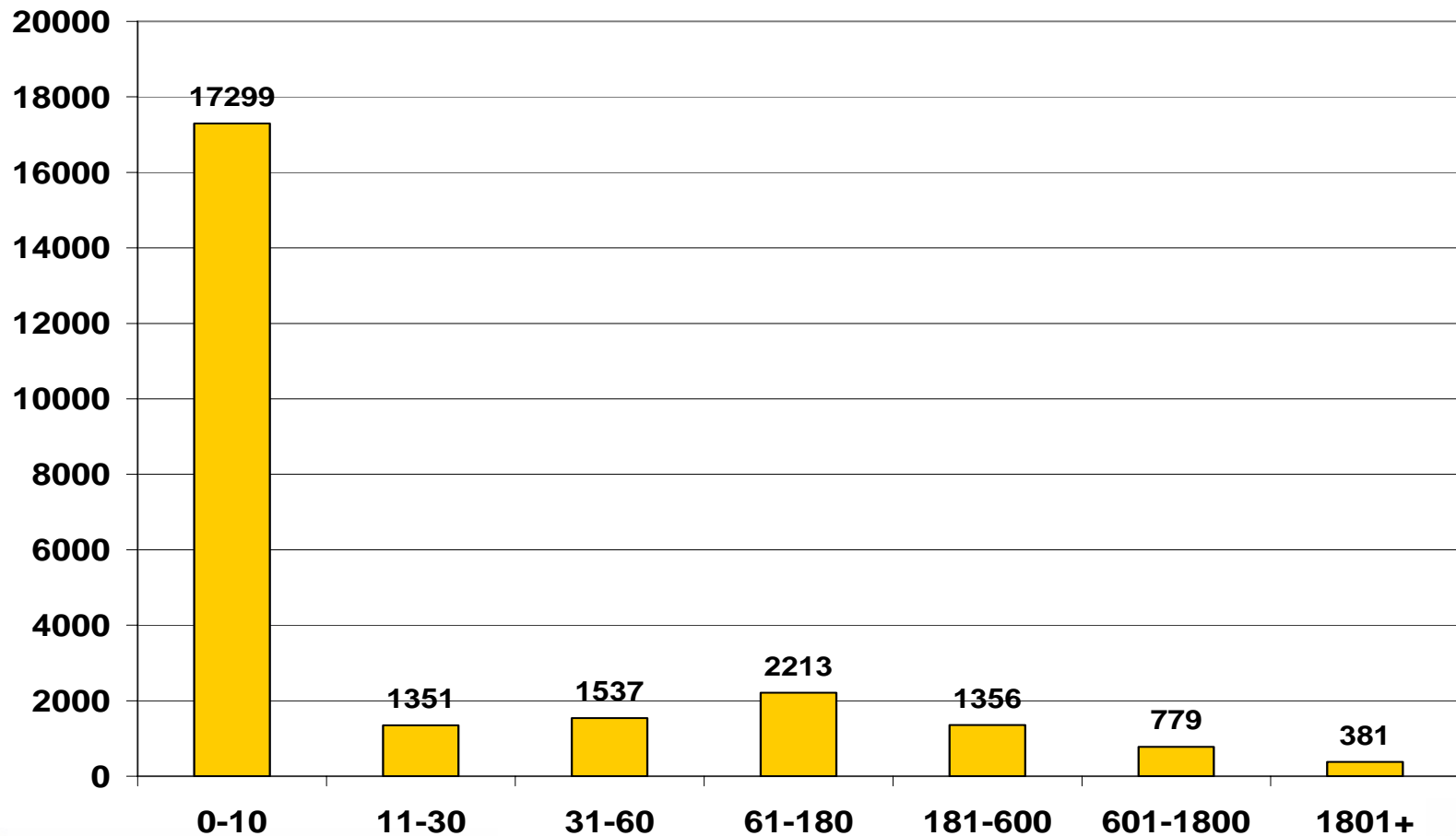
# How do people use the site?

## ■ Web analytics

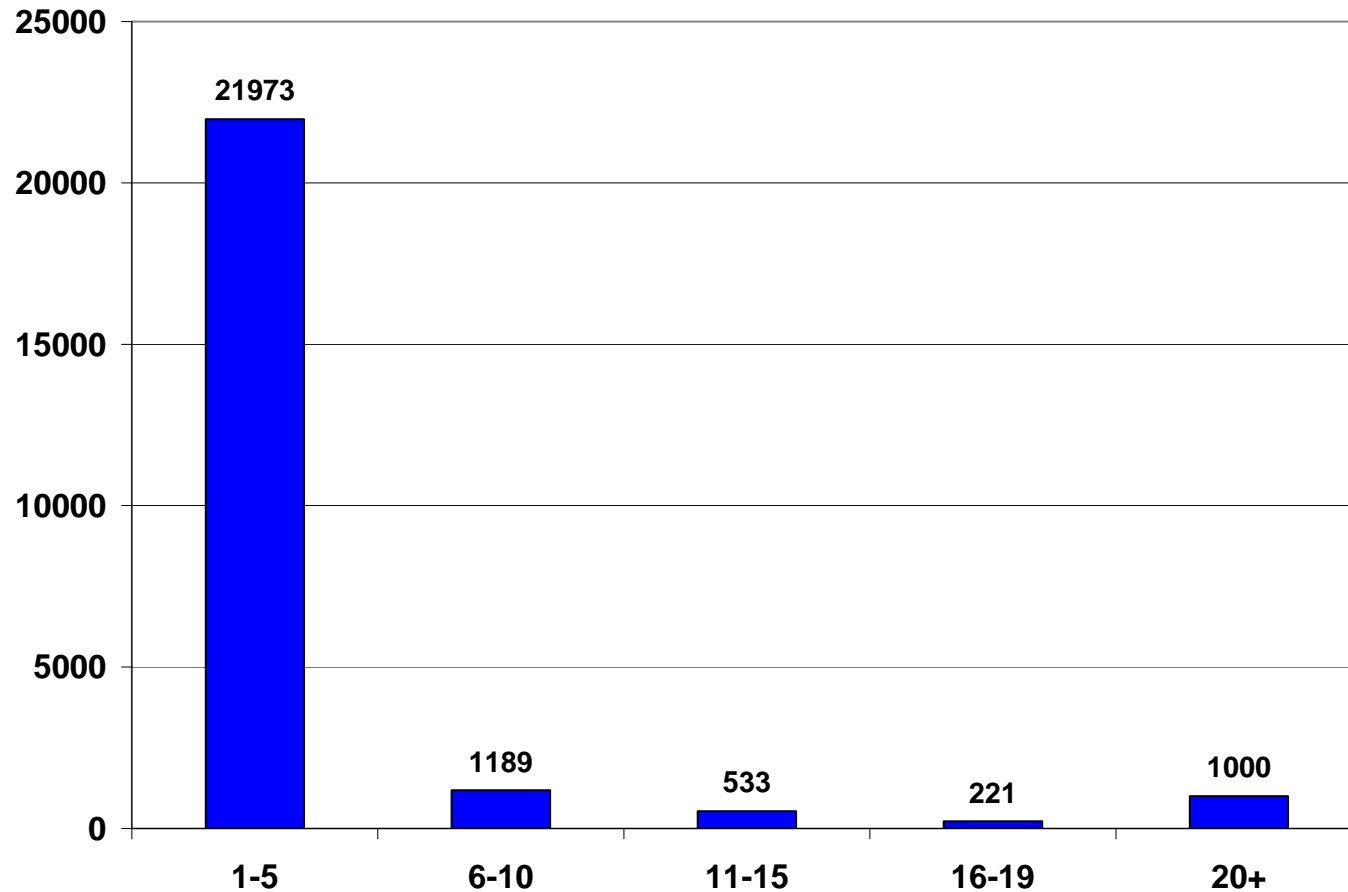
- 24,916 visits (15 August 2006 – 15 February 2007)
- > 20,000 sessions with 5 or fewer page views
- “Committed users” : 2,943 sessions with visitors who viewed 6 or more pages
- 4,729 spent a minute or more on the site\*



# Time Spent (per second) 15 August 2006-15 February 2007



# Page Views per Session



# How do people use the site?

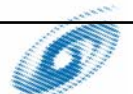
- Traditional architecture
  - Browse
    - Collections
    - Individuals
    - Military units
    - Geographic locations
    - Subject
    - Media type
    - Organizations
  - Bookmarking





# Browsing (August 2006-February 2007)

Page Title	Unique Views	Page Views
Homepage (Welcome)	5411	7457
browse by: <b>geographic location</b>	1859	2911
new advanced <i>search</i>	1822	4162
browse by: <b>individual name</b>	1566	3614
browse by: <b>collection</b>	1448	2578
browse by: <b>media type:</b> Photographs.	1275	2291
Polar Bear History	1126	1344
browse by: <b>military unit</b>	830	1579
United States Army Signal Corps photograph collection	692	1600
Frank J. McGrath photograph album.	592	740
About this site	498	623
<b>Search Results</b>	435	682



# Browsing

- “My preference has basically been to browse by just going through type of subset and then either alphabetically or whatever then go down, scroll down the list until I find what it is I’m looking for” (Interview 1, section 19).



# Bookmarking

- 35 bookmarks (February 2007)
  - Ranging from one person with 19 (a high outlier) to 4 visitors with 1 bookmark each (the mode).
  - Survey respondents and interviewees like bookmarks
- Why low use?
  - Not sharable
  - Browse works well no need to bookmark things that are easy to refind
  - Item bookmarking not implemented until last fall



# How do people use the social navigation features?

- Link Paths
- Comments
- User Profiles



# Link paths

## Grobbell, Clement A.

### Personal Data

alternate spellings: Grobbel, Clement A.

rank: Corporal

company: [United States. Army. Infantry, 339th. Company I.](#)

hometown: [Centerline \(Mich.\)](#)  
[Warren \(Mich.\)](#)

awards/medals: Croix de Guerre  
Distinguished Service Cross (D.S.C.)

action: Attended 1956 reunion  
Action for which he was awarded Distinguished Service Cross, 11/4/1918, Emtsa (Russia)

sources: *The North Russian expedition, the 85th Division's participation*  
*Biennial reunion programs*

external links: ["It's like hunting rabbits, only on a bigger scale" the correspondence of Cpl. Clement A.Grobbel](#)  
[Recipients of the Distinguished Service Cross, compiled and edited by C. Douglas Sterner Word file](#)

### Link Paths

Researchers who viewed this page also viewed:  
[\(learn more...\)](#)

Help : Aldred S. Buckler photograph collection :  
Tools folder 1



# Link Paths

- Initial survey and interviews
  - People unclear what the ‘link paths’ were
- Added ‘researchers who viewed this page also viewed’
- Changed algorithm
  - February 2007
  - Less is more, decreased the number of link patterns needed to populate the link paths
  - Changed the types of information with which the link paths were populated



# User Profiles and Comments

- 62 comments and 19 user profiles
- Types of contributions
  - Information sharing
    - Soldier
    - Family
  - Question asking
  - Donations



# User biographies

user since: Sun Mar 19 at 00:43

was last logged in: Tue Mar 21 at 20:23

**Real Name:** Carrie

I am searching for any information regarding Oliver Alexander Mowat. He was killed in Russia 27 Jan 1919. I have all war diary entries for this time. I also have letters that he wrote home to his parents on board the SS Megantic that took him to Russia. I have all documentation relating to his Military Cross as well as the cross and all original documentation that went with it. I have a few photos of him. I do however know that someone from the U.S Polar Bear Club took Photos of his burial and I wonder if maybe they are still floating around somewhere, passed down from a grandfather maybe? My grandfather corresponded with an Sgt. Seaton.

## Comments by this user:

- ◆ [Re: Re: Re: browse by : individual name : Mowat, O. A.](#)
- ◆ [Re: Re: Re: browse by : individual name : Mowat, O. A.](#)
- ◆ [Re: browse by : individual name : Mowat, O. A.](#)

Maintained by [Carr6](#)





# Comments

Re: Re: browse by : individual name : Mowat, O. A.  
by [mvgrobbel](#) on 2006-03-19 19:21:03

Carrie, I did some research on Capt. O.A. Mowat that will hopefully be helpful to you. There are a number of passages in the book *"Quartered in Hell"* by Dennis Gordon, that describe Capt. Mowat's actions, wounding and death (which probably occurred on Jan. 24, 1919, or maybe on the 23th, but not on the 27th). I have transcribed selected passages from that book (which is out of print and hard to find) and put them on [this web page](#). Capt. Mowat's death is also covered in two books that are still in print: (1) *"The History of The American Expedition Fighting the Bolsheviki"*, by Capt. Joel R. Moore, Lt. Harry H. Mead and Lt. Lewis E. Jahns (Chapter "Ust Padenga", pg. 139) and (2) *"Russian Sideshow, America's Undeclared War, 1918-1920"*, by Robert L. Willett (Chapter 9 "The Vaga Front", pg. 97). For more information about these books, [click here](#). However, Godfrey J. Anderson of the 337th Field Hospital Company, remembered the sequence of events on that fateful day somewhat differently and in more detail than any of these books. For his perspective, please read the *"Godfrey J. Anderson Papers"* here in the Bentley Polar Bear Expedition Digital collections. The events of Jan. 24th are covered on the digitized pages numbered [57](#) through [61](#) in his papers. More information about the 16th Canadian Field Artillery Brigade's activities in North Russia can be found [here](#). Sincerely, [Mike Grobbel \(mvgrobbel\)](#)



# Comments findings

- Most interaction with “The Archivist”
- Existing community transferred to the online community a bit
  - 2<sup>nd</sup> highest amount of interaction on the site with an individual who was also active in the real-life Polar Bear Expedition community
  - He was either addressed directly or he responded to questions
- Other types of uses
  - One expert in boats that intercepted submarines has gone through the photographs and provided detailed information: “Eagle 2 is one of the U.S. Navy Eagle boats built by Ford Motor Company. Eagles 1, 2 and 3 were sent to northern Russia in 1919. See, for example: <http://subchaser.org/set-russia-05>”.



# Donations

- We were unprepared
- Forwarded all donation requests to the Bentley so they could determine how it fit within their collecting goals
- Recently developed donation policy



# Donation Offers

- “The Only thing I would have to donate to your collection would be anything digital I have of Oliver's [O.A. Mowat]... If you would like me to send digital pictures of things I have of Oliver I would be happy to“ (Comment on O.A. Mowat 3/21/2006).



# Discussion points

- Critical mass
- Novelty / convenience of full text archival materials overwhelms other functionality
- Browse as a viable navigational means
- Comment feature most “successful” of all the social navigation features



# What does this mean for traditional use: On-site versus Virtual use

	In the Bentley	Online
1999 (July – December)	51	n/a
2006 (July – December)	5	17,523 visits



# Future Research of the Next Generation Finding Aids Group

- Reconceptualizing large collections (George Romney)
  - Tabbed and tree structure browsing
- Organizational records / Organizational Charts  
(University of Michigan)
  - Organizational charts
  - Data mining through subject headings
- What other projects are out there?
  - <http://del.icio.us/yakel>
- Our website
  - <http://fang.si.umich.edu>
  - <http://fangpolartest.cms.si.umich.edu/>

