

Supporting Faculty Scholarly Activity

Mark Phillips
UNT Libraries – Digital Libraries Division

Digital library infrastructure as a major component
in supporting faculty research and scholarship.

UNT Digital Library

About the Digital Library

The UNT Digital Library is a centralized repository for the rich collections held by the libraries, colleges, schools, and departments at the University of North Texas.

[Read More...](#)

Statistics

Currently we have a total of **60,392** unique items, comprising **3.8 million** files. Over the last **31 days**, we've logged **112,418** uses of these items by people like you.

[More Info...](#)

Recent Additions

The Digital Library continues to grow as new partners contribute digital versions of their collections. See some of our latest materials here.



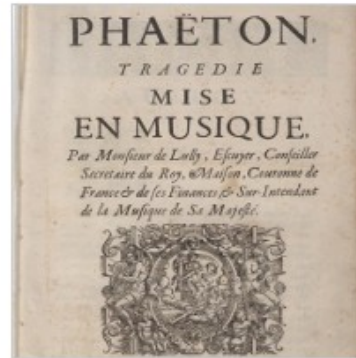
[Recent Additions...](#)

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Featured Collections



Jean-Baptiste Lully Collection

The UNT Music Library's Jean-Baptiste Lully Collection includes almost thirty rare 17th- and 18th-century scores of operas and ballets by the 17th-century French composer Jean-Baptiste Lully and his sons. Many of the volumes are first editions and several are second editions. The collection also contains manuscript copies of operas and one ballet that were probably offered for sale at performances.

1 2 3 4 5

[More Collections...](#)

Featured Partner

Elm Fork Natural Heritage Museum

The Elm Fork Natural Heritage Museum furnishes opportunities to discover and share knowledge about plants, animals, and their environment. The museum provides resources to trained scientists as well as to citizen scientists of all ages and backgrounds to explore natural history and especially to inspire in the young a lifelong interest in nature.

[More Partners](#)

60,000+ items

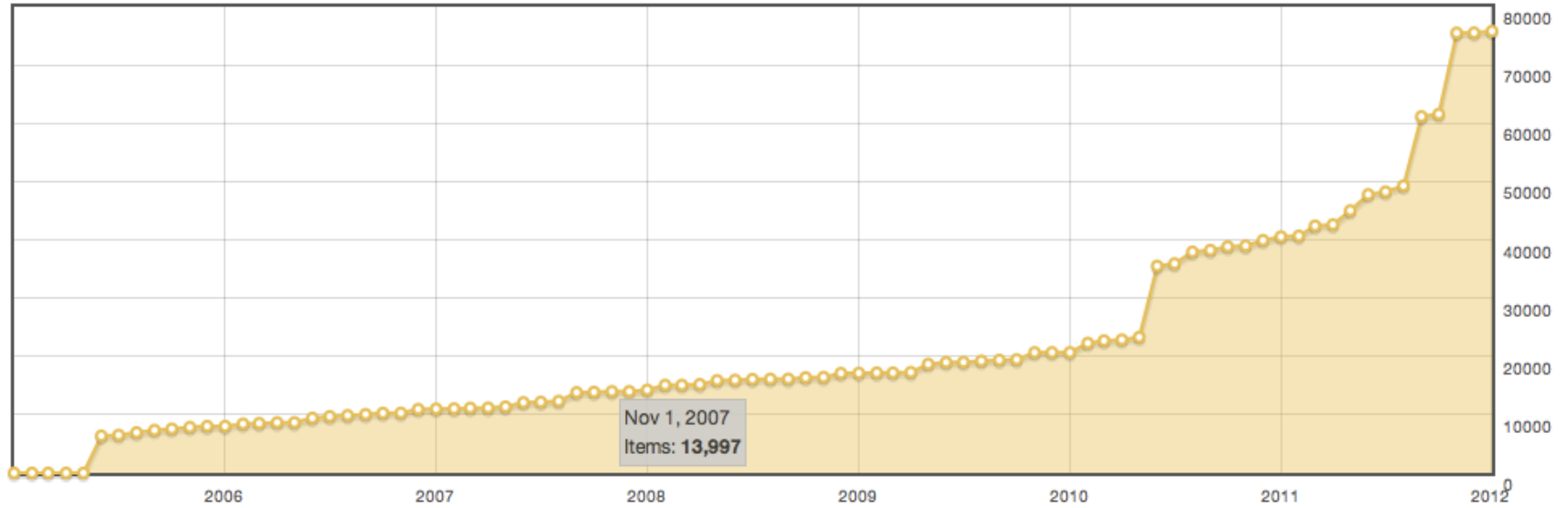
3.8 million primary bitstreams

Statistics for UNT Digital Library

Item Usage Items Added More Data

Items added between January 2005 and January 2012

75,817 Total Items (3,759,370 Files) / **60,392** Visible Items / **15,425** Hidden Items



Item Added by Month/Year

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total
2012	274												274
2011	625	132	1,724	215	2,404	2,768	458	1,030	11,893	407	13,930	31	35,617
2010	0	1,606	412	162	447	12,198	418	2,008	297	614	138	940	19,240
2009	28	50	0	86	1,401	299	31	218	147	90	1,212	3	3,565
2008	252	836	0	125	675	66	139	47	4	240	50	690	3,124
2007	58	39	112	27	185	732	80	155	1,481	70	112	0	3,051
2006	0	396	99	128	9	766	278	176	181	218	23	641	2,915
2005	0	0	0	0	0	6,367	137	438	403	228	285	173	8,031

Over 1.5 million item uses

(in the last 2 years)

Statistics

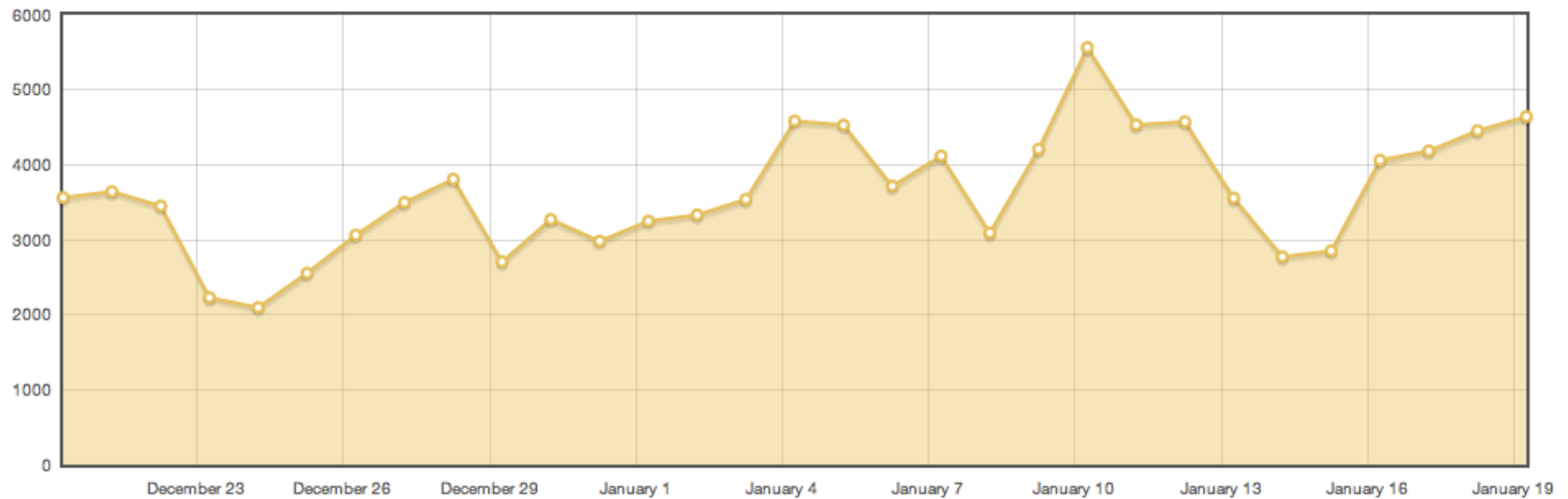
Statistics for UNT Digital Library

Item Usage

Items Added

More Data

1,592,073 Total Uses / **112,418** in the last 31 days.



Usage by Month/Year

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total
2012	75,558												75,558
2011	42,966	44,844	74,430	78,789	94,646	90,361	78,834	66,644	84,634	99,434	104,059	107,941	967,582
2010	33,373	60,165	73,386	58,433	40,585	40,312	34,378	32,558	39,031	44,983	50,383	39,987	547,574
2009	0	0	0	0	0	0	7	2	15	9	242	1,084	1,359

Almost one million uses last year

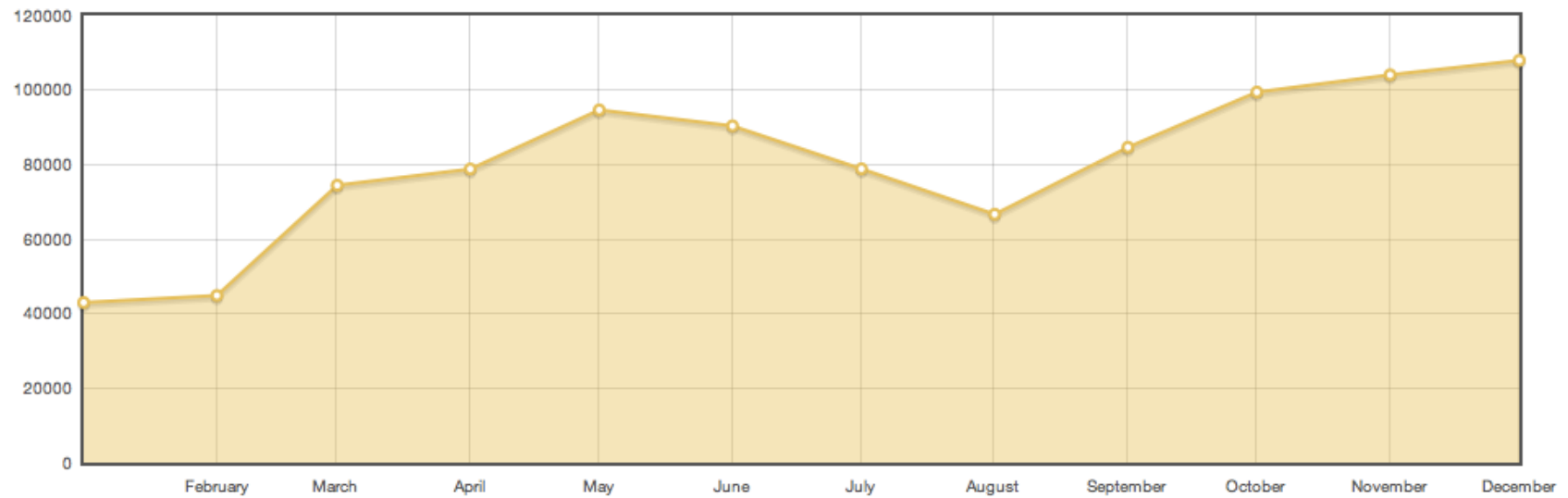
Statistics for UNT Digital Library

Item Usage

Items Added

More Data

1,592,073 Total Uses. / **967,582** in 2011



Usage by Month/Year

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total
2012	75,558												75,558
2011	42,966	44,844	74,430	78,789	94,646	90,361	78,834	66,644	84,634	99,434	104,059	107,941	967,582
2010	33,373	60,165	73,386	58,433	40,585	40,312	34,378	32,558	39,031	44,983	50,383	39,987	547,574
2009	0	0	0	0	0	0	7	2	15	9	242	1,084	1,359

[Overview](#) [Locations](#) [Dates](#) [Types](#) [Partners](#) [Collections](#)

Locations

Use this feature to explore items about, or located in, a specific region, country, or U.S. State.

Africa, Antarctica, Australia/Oceania, Central America and Caribbean, Central Asia, East & Southeast Asia, Europe, Middle East, North America, South America, South Asia

[Explore all locations...](#)

Dates

Use this feature to explore items about, or created in, a particular century. You can also create your own date range.

[Explore all dates...](#)

Types

Use this feature to explore items categorized by publication or creation type such as artwork, book, or web site.

[Explore all types...](#)

Collections

Grouped around specific themes, collections may be narrow or broad in scope. Choose a collection from the alphabetic list or select "all."

- [a](#) [b](#) [c](#) [d](#) [e](#)
- [f](#) [g](#) [h](#) [i](#) [j](#)
- [k](#) [l](#) [m](#) [n](#) [o](#)
- [p](#) [q](#) [r](#) [s](#) [t](#)
- [u](#) [v](#) [w](#) [x](#) [y](#)
- [z](#) [all](#)



[Explore all collections...](#)

Partners

Use this feature to learn more about our partners and the materials they contribute to the Digital Library. Choose a partner from the alphabetic list, or select "all."

- [a](#) [b](#) [c](#) [d](#) [e](#)
- [f](#) [g](#) [h](#) [i](#) [j](#)
- [k](#) [l](#) [m](#) [n](#) [o](#)
- [p](#) [q](#) [r](#) [s](#) [t](#)
- [u](#) [v](#) [w](#) [x](#) [y](#)

Partners from across the university.


Help with Exploring

Use this feature to learn more about our partners and the materials they contribute to the Digital Library. Choose from an alphabetic list or select "all."

[See all Exploring FAQs](#)

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Stay updated

 Receive updates when new partners are added to the Digital Library.

Explore by Partners

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University Relations, Communicatons & Marketing for UNT

The award-winning Division of University Relations, Communications and Marketing (URCM) is the chief communications and marketing organization for the University of North Texas. The division enhances and protects UNT's institutional reputation; grows and strengthens the university's brand; encourages community engagement; and reinforces the university's relevance in the lives of key target audiences,

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UNT Archives

Created in 1975, the University of North Texas Archives houses university records of enduring value and documents the development of North Central Texas. The Archive's physical collections include historical manuscripts, photographs, and oral histories, as well as a variety of records from UNT's administrative and academic offices. In addition, the Archives serves as a depository for the microfilmed records of Cooke, Denton, Montague, and Wise Counties in Texas. Access to information in the Archives is governed by federal law, the Texas Public Information Act, and contractual agreement with donors.

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UNT Center for Economic Development and Research

The UNT Center for Economic Development and Research performs economic analysis and public policy research, providing forecasting and strategic planning services to businesses, governments, and non-profit organizations.

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Contributing to a wide range of collections

Help with Exploring

Collections group materials around specific themes. The scope may be narrow or very broad. Explore collections in the Digital Library by choosing from an alphabetic list or by selecting "all."

[See all Exploring FAQs](#)

[See all Exploring Help Guides](#)

Stay updated

 Receive updates when new collections are added to the Digital Library.

Explore by Collections

[a](#) [b](#) [c](#) [d](#) [e](#) [f](#) [g](#) [h](#) [i](#) [j](#) [k](#) [l](#) [m](#) [n](#) [o](#) [p](#) [q](#) [r](#) [s](#) [t](#) [u](#) [v](#) [w](#) [x](#) [y](#) [z](#) [all](#)

Advisory Commission on Intergovernmental...



The Advisory Commission on Intergovernmental Relations (ACIR) was an independent, bipartisan intergovernmental agency established by Public Law 86-380 in 1959. The ACIR Collection is composed of the agency's publications that study the interactions between different levels of government.

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Annals of Congress



The Annals of Congress is a record of the United States Congress from the First Congress in 1789 through the First Session of the Eighteenth Congress in 1824. The Annals are a summary rather than a transcription, compiled after 1834 from newspaper accounts. It is succeeded by the Register of Debates, the Congressional Globe, and the Congressional Record.

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ARTsource



The images of artworks in this collection supplement the artworks in the Visual Resources Collection of the College of Visual Arts + Design's online image database used for instruction, study, and presentation. Included here are images of paintings, drawings, prints, architecture, material culture, sculpture, photographs, furniture, fashion, and much more from vendors such as Saskia, Ltd.; ART on FILE; Hartill Art Associates; Davis Art Images; and Bridgeman Art Library. **Access to these images is restricted to the UNT community.**

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A demonstration of a collection.

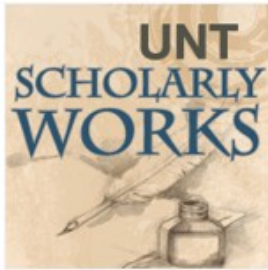
UNT Scholarly Works

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About this Collection



The Scholarly Works Collection is home to materials from the UNT community's research, creative, and scholarly activities. It serves as UNT's Open Access Repository. This collection brings together articles, papers, artwork, music, research data, reports, presentations, and other scholarly and creative products representing the expertise in our university community.

UNT Scholarly Works aims to:

- Provide easy access to valuable scholarly and creative materials from the UNT community
- Promote discovery through effective search and navigation tools
- Secure long-term access through stewardship and preservation
- Ensure sustainability through continuing system improvements
- Showcase UNT's research and creative achievements to a worldwide audience

To learn more about UNT Scholarly Works, see [our web page](#) or contact us at untrepository@unt.edu.

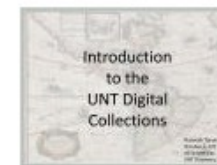
[Browse the holdings of this collection](#)

Latest Additions

Contributors



Cultural Memory and Heirloom Seeds: The Foundation of Local Food Systems
Added: 11/28/2011



Introduction to the UNT Digital Collections
Added: 11/24/2011



The Relationship of Electronic Reference and the Development of Distance Education Programs
Added: 11/24/2011



Activities and Experiences of

Standard searching with support for facets.

Partner:

- ❖ [UNT College of Engineering \(84\)](#)
- ❖ [UNT College of Arts and Sciences \(47\)](#)
- ❖ [UNT Libraries \(23\)](#)
- ❖ [UNT College of Public Affairs and Community Service \(17\)](#)
- ❖ [UNT College of Information \(13\)](#)
- ❖ [More...](#)

Department:

- ❖ [Computer Science and Engineering \(84\)](#)
- ❖ [Physics \(34\)](#)
- ❖ [Library and Information Science \(15\)](#)
- ❖ [Digital Projects Unit \(14\)](#)
- ❖ [Libraries \(14\)](#)
- ❖ [More...](#)

Decade:

- ❖ [2010-2019 \(41\)](#)
- ❖ [2000-2009 \(145\)](#)
- ❖ [1990-1999 \(1\)](#)

Serial Title:

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fulltext

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You limited your search to:

- ✓ **Resource Type:** Article
- ✓ **Collection:** UNT Scholarly Works

Results 1 - 10 of 187



Sort by: Title ▾



Absorption and Emission in the Non-Poissonian Case

Date: 2004-07-28

Creator: Aquino, Gerardo

Description: This article addresses the challenging problems posed to the Kubo-Anderson (KA) theory by the discovery of intermittent resonant fluorescence with a nonexponential distribution of waiting times. The authors show how to extend the KA theory from aged to aging systems, aging for a very extended time period or even forever, being a crucial consequence of non-Poisson statistics.

Contributing Partner: UNT College of Arts and Sciences



The AGC Kinase MtIRE: A Link to Phospholipid Signaling During Nodulation?

Date: 2007

Creator: Pislariu, Catalina I.

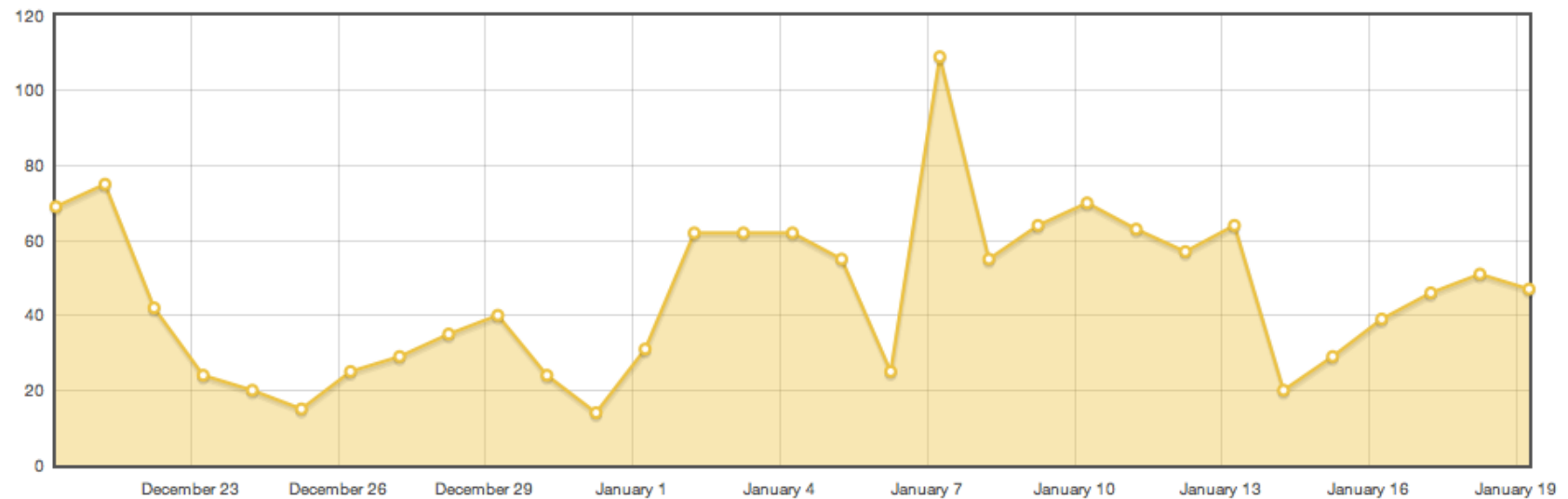
Usage data for the collection

Statistics for UNT Scholarly Works

Item Usage

More Data

12,579 Total Uses / **570** Total Items (15,291 files) / **558** Visible / **12** Hidden



Usage by Month/Year

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total
2012	1,011												1,011
2011	221	405	474	910	1,002	862	988	795	1,262	1,311	1,753	1,279	11,262
2010	0	0	0	0	0	0	0	0	0	0	152	154	306

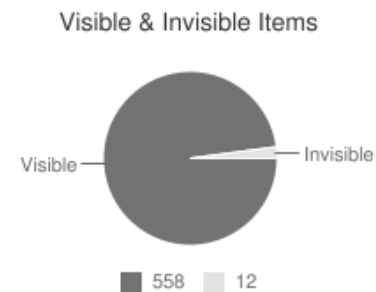
Statistics for UNT Scholarly Works

Item Usage

More Data

Totals

Total Number of Items	570
Total Number of Visible Items	558
Total Number of Hidden Items	12
Total Number of Files	15,291
Total Number of Uses	12,579



Statistics for Contributing Partners

Name	Items Held
UNT Center For Environmental Philosophy	4 items
UNT Center for Economic Development and Research	57 items
UNT College of Arts and Sciences	70 items
UNT College of Business	2 items
UNT College of Education	4 items
UNT College of Engineering	127 items
UNT College of Information	35 items
UNT College of Music	1 item
UNT College of Public Affairs and Community Service	30 items
UNT College of Visual Arts + Design	1 item
UNT Health Science Center	1 item
UNT Libraries	238 items

Collection API documentation

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APIs for UNT Scholarly Works

Introduction

The UNT Digital Library provides public access to number of application programming interfaces (APIs) to the collections within the system. Below are examples of APIs available for UNT Scholarly Works that can be used openly by those interested in programatically accessing data from this system. You do not need to apply for a special key to use these APIs.

For additional information about these APIs or if you have general questions about machine interaction with the UNT Digital Library please contact [Mark Phillips](#).

Note that all example URLs below use the same protocol and server name, <http://digital.library.unt.edu/explore/collections/UNTSW/>. We only show the URL paths and parameters below to save space.

The API

OAI-PMH

The Open Archives Initiative's Protocol for Metadata Harvesting (OAI-PMH) allows programatic access to this collection's metadata. Two metadata formats are currently supported, the standard oai_dc and the UNT Libraries native metadata format untl.

Below are example URLs which demonstrate some of the standard views of this OAI-PMH repository:

- [oai/](#)
base URL for OAI-PMH repository
- [oai/?verb=Identify](#)
Display information about this repository
- [oai/?verb=ListMetadataFormats](#)
List available metadata formats
- [oai/?verb=ListSets](#)
List available sets
- [oai/?verb=ListRecords&metadataPrefix=oai_dc](#)
Display records in the oai_dc metadata format
- [oai/?verb=ListRecords&metadataPrefix=untl](#)
Display records in the untl metadata format

SRU

Search/Retrieval via URL (SRU) can be used to run advanced queries on the content of this collection. A human readable stylesheet has been added to help demonstrate searches via SRU. You can see this interface at the following URL.

OAI-PMH repository

OAI 2.0 Request Results

[Identify](#) | [ListRecords](#) | [ListSets](#) | [ListMetadataFormats](#) | [ListIdentifiers](#)

You are viewing an HTML version of the XML OAI response. To see the underlying XML use your web browsers view source option. More information about this XSLT is at the [bottom of the page](#).

Datestamp of response	2012-01-20T23:40:49Z
Request URL	http://digital.library.unt.edu/explore/collections/UNTSW/oai/

Request was of type Identify.

Repository Name	UNT Scholarly Works, hosted by the University of North Texas Libraries
Base URL	http://digital.library.unt.edu/explore/collections/UNTSW/oai/
Protocol Version	2.0
Earliest Datestamp	2004-05-19T00:00:00Z
Deleted Record Policy	transient
Granularity	YYYY-MM-DDThh:mm:ssZ
Admin Email	mark.phillips@unt.edu

Unsupported Description Type

The XSL currently does not support this type of description.

```
<toolkit xsi:schemaLocation="http://oai.dlib.vt.edu/OAI/metadata/toolkit http://oai.dlib.vt.edu/OAI/metadata/toolkit.xsd" >
  <title>pyoai</title>
  <version>2.4.4</version>
  <URL>http://infracore.com/products/oaipack</URL>
</toolkit>
```

[Identify](#) | [ListRecords](#) | [ListSets](#) | [ListMetadataFormats](#) | [ListIdentifiers](#)

OAI 2.0 Request Results

[Identify](#) | [ListRecords](#) | [ListSets](#) | [ListMetadataFormats](#) | [ListIdentifiers](#)

You are viewing an HTML version of the XML OAI response. To see the underlying XML use your web browsers view source option. More information about this XSLT is at the [bottom of the page](#).

Datestamp of response	2012-01-20T23:41:28Z
Request URL	http://digital.library.unt.edu/explore/collections/UNTSW/oai/

Request was of type ListRecords.

OAI Record: info:ark/67531/metadc28337

OAI Record Header

OAI Identifier	info:ark/67531/metadc28337	oai_dc	formats
Datestamp	2011-05-09T13:08:27Z		
setSpec	partner:UNT	Identifiers	Records
setSpec	collection:UNTSW	Identifiers	Records
setSpec	access_rights:public	Identifiers	Records

Dublin Core Metadata (oai_dc)

Title	Annexation of Texas Project
Author or Creator	Phillips, Mark Edward
Subject and Keywords	preservation
Subject and Keywords	annexation
Subject and Keywords	Tex-Treasures
Subject and Keywords	Texas State Library and Archives Commission
Description	This presentation outlines the "From Republic to State: Debates and Documents Relating to the Annexation of Texas, 1836-1856" project. This grant funded project involved digitizing 6000 objects.
Other Contributor	American Library Association (ALA)

Access to full metadata records

OAI Record: info:ark/67531/metadc28337

OAI Record Header

OAI Identifier	info:ark/67531/metadc28337	oai_dc	formats
Datestamp	2011-05-09T13:08:27Z		
setSpec	partner:UNT	Identifiers	Records
setSpec	collection:UNTSW	Identifiers	Records
setSpec	access_rights:public	Identifiers	Records

Unknown Metadata Format

```
<untl:metadata>
  <untl:title qualifier="officialtitle" >Annexation of Texas Project</untl:title>
  <untl:creator qualifier="aut" >
    <untl:type>per</untl:type>
    <untl:name>Phillips, Mark Edward</untl:name>
  </untl:creator>
  <untl:contributor qualifier="orm" >
    <untl:type>org</untl:type>
    <untl:name>American Library Association (ALA)</untl:name>
  </untl:contributor>
  <untl:date qualifier="creation" >2003-06-21</untl:date>
  <untl:language>eng</untl:language>
  <untl:description qualifier="physical" >11 p.</untl:description>
  <untl:description qualifier="content" >This presentation outlines the "From Republic to State: Debates and Documents Relating to the Annexation of Texas, 1836-1856" project. This grant funded project involved digitizing 6000 objects.</untl:description>
  <untl:subject qualifier="KWD" >preservation</untl:subject>
  <untl:subject qualifier="KWD" >annexation</untl:subject>
  <untl:subject qualifier="KWD" >Tex-Treasures</untl:subject>
  <untl:subject qualifier="KWD" >Texas State Library and Archives Commission</untl:subject>
  <untl:source qualifier="conference" >Digitization of Government Information by Government Documents Round Table (GODART) [Preconference], American Library Association (ALA) Annual Conference, 2003, Toronto, Canada</untl:source>
  <untl:collection>UNTSW</untl:collection>
  <untl:institution>UNT</untl:institution>
  <untl:rights qualifier="access" >public</untl:rights>
  <untl:rights qualifier="license" >by-nc</untl:rights>
  <untl:resourceType>image_presentation</untl:resourceType>
  <untl:format>image</untl:format>
  <untl:degree qualifier="department" >Digital Projects Unit</untl:degree>
  <untl:meta qualifier="ark" >ark:/67531/metadc28337</untl:meta>
  <untl:meta qualifier="metadataCreationDate" >2010-08-31, 22:25:24</untl:meta>
  <untl:meta qualifier="metadataCreator" >acpmaker</untl:meta>
  <untl:meta qualifier="system" >DC</untl:meta>
  <untl:meta qualifier="metadataModifier" >lwaugh</untl:meta>
  <untl:meta qualifier="metadataModificationDate" >2011-05-09, 13:08:27</untl:meta>
  <untl:meta qualifier="hidden" >False</untl:meta>
</untl:metadata>
```

SRU endpoint

SRU Server for Collection UNT Scholarly Works, hosted by UNT Libraries

The Scholarly Works Collection is home to materials from the UNT community's research, creative, and scholarly activities. It serves as UNT's Open Access Repository. This collection brings together articles, papers, artwork, music, research data, reports, presentations, and other scholarly and creative products representing the expertise in our university community. Access to some items in this collection may be restricted.

Search

Search

Index	Relation	Term	Boolean
contributor	=	<input type="text"/>	and
coverage	=	<input type="text"/>	and
creator	=	<input type="text"/>	and
date	=	<input type="text"/>	and
description	=	<input type="text"/>	and
format	=	<input type="text"/>	and
identifier	=	<input type="text"/>	and
language	=	<input type="text"/>	and
publisher	=	<input type="text"/>	and
relation	=	<input type="text"/>	and
rights	=	<input type="text"/>	and
source	=	<input type="text"/>	and
subject	=	<input type="text"/>	and
title	=	<input type="text"/>	and

Record Schema:

Dublin Core

Number of Records:

10

Browse

Browse

Index	Relation	Term
contributor	=	<input type="text"/>

Response Position:

10

Maximum Terms:

20

Browse

OpenSearch endpoint.

OpenSearch Form for UNT Scholarly Works

Search Terms

Result Format ▾

Contact Us

For questions regarding content on this site, contact us: [feedback](#).

Hosted by [The University of North Texas Libraries](#)

Site last updated on Tuesday, Jan 10, 2012

Technical problems?

For problems regarding this web site, contact us [feedback](#).

Rights Information

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Links

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Other helper APIs

ark:/67531/metadc29807
ark:/67531/metadc29308
ark:/67531/metadc29323
ark:/67531/metadc29313
ark:/67531/metadc29322
ark:/67531/metadc28337
ark:/67531/metadc28338
ark:/67531/metadc28339
ark:/67531/metadc28345
ark:/67531/metadc28342
ark:/67531/metadc28341
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ark:/67531/metadc28367
ark:/67531/metadc28360
ark:/67531/metadc28368
ark:/67531/metadc28366
ark:/67531/metadc28363
ark:/67531/metadc28321
ark:/67531/metadc28320
ark:/67531/metadc28324
ark:/67531/metadc28323
ark:/67531/metadc29305
ark:/67531/metadc29302
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Simple, flexible data model

Absorption and Emission in the Non-Poissonian Case

Brief Record

Full Record

Statistics

VOLUME 91, NUMBER 5 PHYSICAL REVIEW LETTERS week ending 06 JULY 2004

Absorption and Emission in the Non-Poissonian Case

Gerardo Aquino,¹ Luigi Palatella,² and Paolo Grigolini^{1,3,4}

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 (Received 20 February 2004; published 28 July 2004)

This Letter addresses the challenging problems posed to the Kubo-Anderson (KA) theory by the discovery of intermittent resonant fluorescence with a nonexponential distribution of waiting times. We also have to revisit the KA theory from aged to aging systems, aging for a very extended time period or even forever, being a crucial consequence of non-Poisson statistics.

DOI: 10.1103/PhysRevLett.91.050601 PACS numbers: 03.65.-w, 32.40.+g, 43.30.+v

In the last few years, as a consequence of an increasingly faster technological advance, it has become clear that the conditions of ordinary statistical mechanics assumed by the line shape theory of Kubo and Anderson (KA) [1], are violated by some of the new materials. For instance, the experimental research work of Neuhäuser et al. [2] has established that the fluorescence emission of single nanocrystals exhibits interesting intermittent behavior, namely, a sequence of "light on" and "light off" states, departing from Poisson statistics. In fact, the waiting time distribution in both cases is nonexponential, and it shows a universal power law behavior [3]. In this Letter, for simplicity, we focus to both states the same waiting time distribution

$$w(t) = (x-1) \frac{t^{x-1}}{(t+x)^2}, \quad (1)$$

with $1 < x < \infty$. The parameter $x > 0$ is introduced for the purpose of making $w(t)$ finite at $t = 0$ as to stress its nonrelativistic. We shall focus on the case where $x < 2$. In accordance with Bokkema et al. [4], the experimental condition $x < 2$ implies that the observed waiting time distribution depends on the time at which observation begins. Let us assume that the probability of the first jump from the "on" ("off") to the "off" ("on") state is given by Eq. (1), if the observation begins at $t = 0$. If the observation begins at a later time $t_0 > 0$, the distribution of the system times, before the first jump, turns out to be different from Eq. (1) as it is t_0 dependent and, for this reason, is denoted by $f(t, t_0)$. This is the property responsible for the breakdown of the ordinary KA theory: it is the aging effect on which we focus our attention in this Letter. It is worth noticing that when $x > 2$, this aging effect is still present, as a two dynamic form, given the fact that a stationary condition exists, even if the regression to it takes a virtually infinite time at $x = 3$ [5]. The authors of Ref. [6] showed how to derive the absorption line shape in the case $x > 2$, when the stationary condition applies, and evaluated the facts that the spectrum would have, immediately after switching on the radiation field, when the nonstationary condition $x < 2$ holds true. Here we illustrate a way to evaluate the time evolution of the absorption operators, so as to take into account the aging effects of Bokkema et al., with $x < 2$, as well as those of Ref. [5], with $x > 2$. We use the following stochastic equation

$$\frac{d}{dt} \rho(t) = (a_0 + f(t)g(t)) \rho(t), \quad (2)$$

The quantity $\rho(t)$ is a complex number, corresponding to the operator $\rho(t)$ of the most rigorous quantum mechanical treatment [7], [8] being the excited and the ground state, respectively, a_0 is the energy difference between the excited and the ground state, and $f(t)g(t)$ denotes the energy fluctuations caused by the cooperative environment of this system. In the presence of the coherent excitation, Eq. (2) becomes

$$\frac{d}{dt} \rho(t) = (a_0 + f(t)g(t) + i\text{Im}(\rho(t))), \quad (3)$$

where i denotes the radiation field frequency. It is convenient to adopt the rotating-wave approximation. Let us express Eq. (3) by means of the transformation $\mu(t) = \exp(-i a_0 t) \rho(t)$. After some algebra, we get a simple equation of motion for $\mu(t)$. For simplicity we denote $\mu(t)$ with the symbol $\mu(t)$ again, thereby making the resulting equation read

$$\frac{d}{dt} \mu(t) = \delta(t) + f(t)g(t) + k, \quad (4)$$

where $\delta = a_0 - \omega$. The reader can easily establish the connection between this picture and the stochastic Bloch equation of Ref. [7] by setting $\mu = \sigma = \sigma_z$. Note that the three components of the Bloch vector in Ref. [7], $(\sigma_x, \sigma_y, \sigma_z)$, are related to the rotating wave representation of the density matrix ρ , σ_x and σ_y being the imaginary and the real part of $\sigma = \rho_{12}$, and σ_z being defined by $\sigma_z = (\sigma_{11} - \sigma_{22})/2$. Note that the equivalence with the picture of Ref. [7] is established by assuming the relative lifetime of the excited state to be infinitely large and the Rabi frequency $\Omega = 4$ vanishingly small.

050601-1 0031-9007/04/91(5):050601-06\$22.50 © 2004 The American Physical Society 050601-1

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Absorption and Emission in the Non-Poissonian Case

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Absorption and Emission in the Non-Poissonian Case

4 page hits in text for *absorption and emission*

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... that the real part of $\langle t \rangle$ can be used to denote either **emission** or **absorption** at time t . We note that..., has also the effect of making the **absorption** identical to the **emission** spectrum. Figure 1 illustrates... implying that the distribution of waiting times before the first jump, is not $i(t)$, **and** $f(t, t')$ has to be... one of the two states begins exactly a time t_0 **and** ends at time $t = t_1$. For $N/2$ of these sequences... we use the "light on" as initial condition, **and** for $N/2$ the "light off" state. Let us consider the



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... VOLUME 93, NUMBER 5 PHYSICAL REVIEW LETTERS **Absorption and Emission** in the Non-Poissonian Case... **absorption** line shape in the case $\nu > 2$, when the stationary condition applies, **and** evaluated the form that... Gerardo Aquino,¹ Luigi Palatella,² **and** Paolo Grigolini^{1,2,3} 1Center for Nonlinear Science, University of... Pisa **and** INFN, via Buonarroti 2, 56126 Pisa, Italy 3Istituto dei Processi Chimico Fisici del CNR Area... that the conditions of ordinary statistical mechanics assumed by the line shape theory of Kubo **and**



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.... Comparison between numerical **and** theoretical **absorption** spectra for different values of the detuning... $\langle u \rangle [1 - \langle u \rangle] (20)$ **and** $S_{+}(u) f' dt' F(t - t', t') e^{-(t-t')/u} - f(u) (u a) (21)$ $(U - A... e(t) = -W$, for the fluctuating variable **and** is derived from the expression for $A_{+}(u)$ by replacing... $\langle (t) \rangle$. Finally $kC(u)/2$ is the Laplace transform of $\langle t \rangle$, **and** it is derived from the earlier... both Figs. 1 **and** 2, where the analytical predictions are compared to the corresponding numerical



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... $\langle v \rangle < 3$, **and** found that the corresponding spectrum has two sharp peaks. Klafter **and** Zumofen, in Ref... exponential characteristic function, **and** consequently a Lorentzian spectrum. It is remarkable that our... theoretical perspective establishes a connection between the prediction of Zumofen **and** Klafter, valid at short... times, **and** that of Ref. [9], valid at large times. Remarkably, we evaluate numerically also the spectrum... single trajectory starting a time t' with $s + W$ **and** ending at time t with the same positive l value

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Absorption and Emission in the Non-Poissonian Case

Gerardo Aquino,¹ Luigi Palatella,² and Paolo Grigolini^{1,2,3}¹Center for Nonlinear Science, University of North Texas, P.O. Box 311427, Denton, Texas 76203-1427, USA²Dipartimento di Fisica dell'Università di Pisa and INFN, via Buonarroti 2, 56126 Pisa, Italy³Istituto dei Processi Chimico Fisici del CNR Area della Ricerca di Pisa, Via G. Moruzzi 156124 Pisa, Italy
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DOI: 10.1103/PhysRevLett.93.050601

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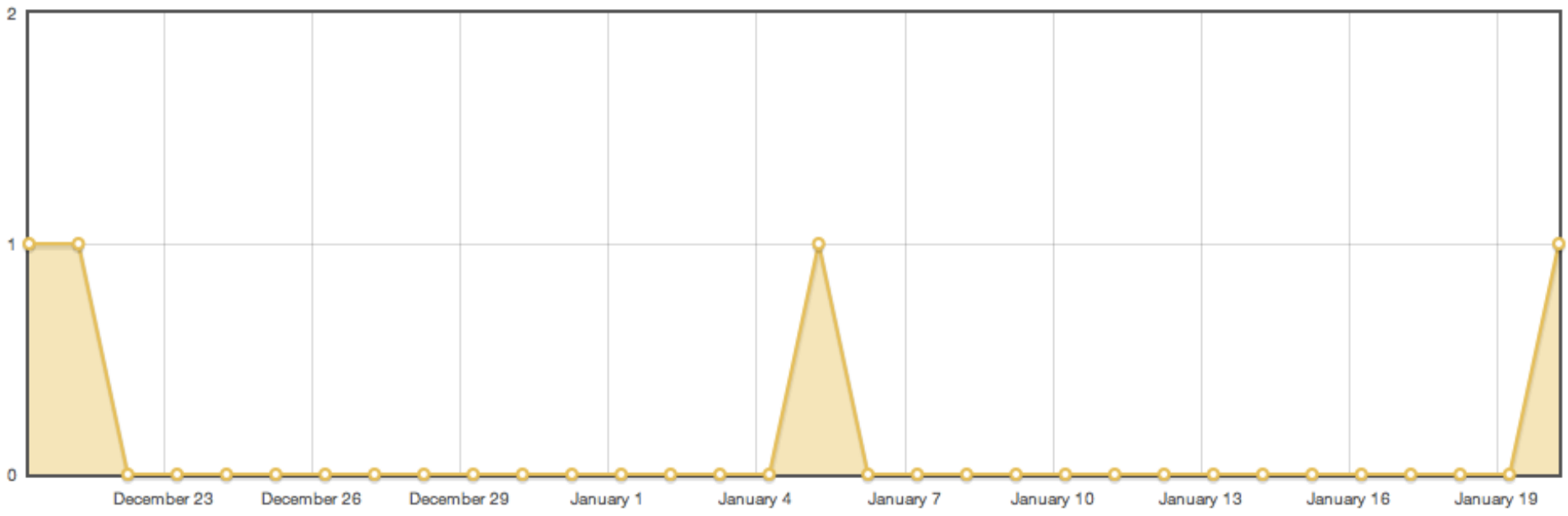
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The Application of Hackman and Oldham's Job Characteristic Model to Perceptions Community Music School Faculty Have Towards Their Job

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THE APPLICATION OF HACKMAN AND OLDHAM'S JOB
CHARACTERISTIC MODEL TO PERCEPTIONS COMMUNITY MUSIC

SCHOOL FACULTY HAVE TOWARDS THEIR JOB

Robert M. Lawrence, B.A., M.N.E.

Dissertation Prepared for the Degree of
DOCTOR OF PHILOSOPHY

UNIVERSITY OF NORTH TEXAS
August 2001

APPROVED:

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Professor and Program Coordinator
for Music Education
Dr. Kris Cheeky, Minor Professor
Dr. Warren Henry, Committee Member and
Chair of the Department of Music
Education
Dr. Darby J. Ranney, Committee Member
Dr. Tom Clark, Dean of the College of
Music
C. Neal Tate, Dean of the Robert H.
Toussaint School of Graduate Studies

Description:

Hackman and Oldham's Job Characteristic Model was applied to study of perceptions community music school faculty hold towards their job. The research questions addressed core job characteristics of skill variety, task identity, task significance, autonomy, and feedback, critical psychological states (experienced meaningfulness, experienced responsibility, and knowledge of results); personal and work outcomes of satisfaction and motivation; need for professional growth. The results were compared to the national norms for nine different job families provided by Oldham, Hackman, and Stepina. Thirty-three schools, all members of the National Guild of Community Schools of the Arts, located in every geographical region of the United States, yielded 437 faculty responses (64% return rate). Of the core job characteristics, dealing with others and autonomy received the highest ratings; feedback and task significance received the lowest ratings. Of the psychological states, experienced responsibility yielded the highest rating and experienced meaningfulness yielded the lowest ratings. Of the personal/work outcomes, personal



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The Application of Hackman and Oldham's Job Characteristic Model to Perceptions Community Music School Faculty Have Towards Their Job

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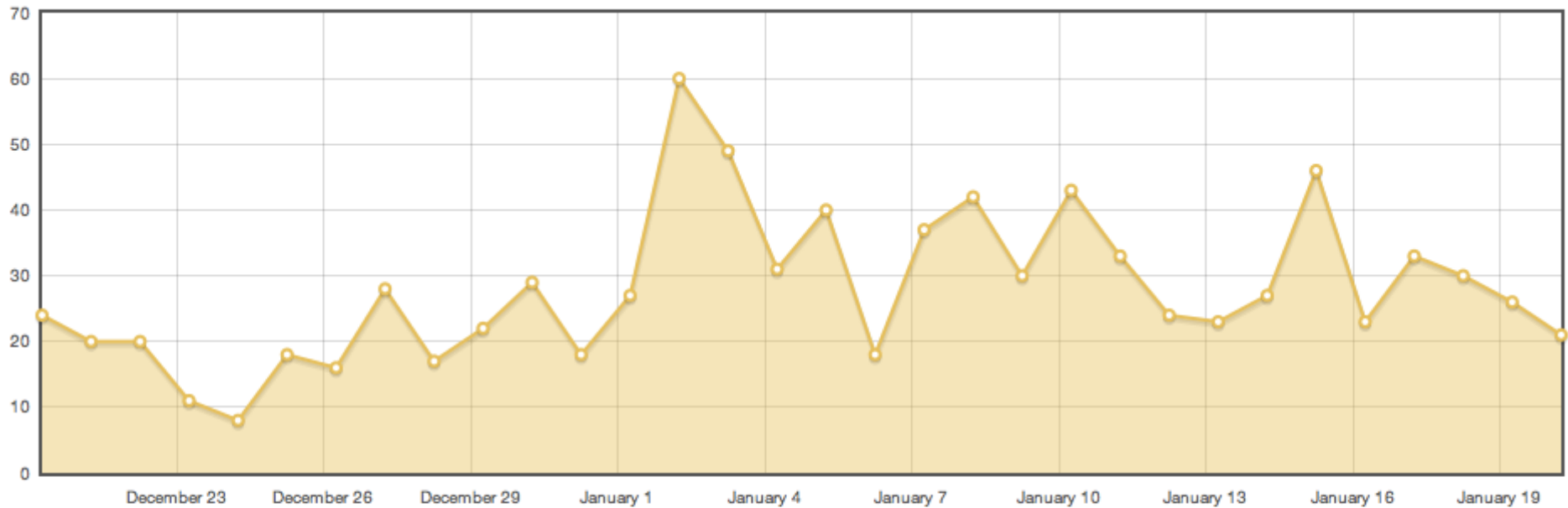
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Absorption and Emission in the Non-Poissonian Case

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About Joseph C. Britton, Jr.



Joseph C. Britton, Jr. was born on October 14, 1942 in Fort Worth, Texas. He earned a Bachelor's of Science and a Master's Degree in Biology from Texas Christian University (1963 and 1965 respectively). He

earned a Ph.D. from George Washington University in 1970. His career began as the Assistant Director of Exhibits at the Smithsonian Institution National Museum of Natural History in Washington, D.C. where his early studies were of the marine bivalve family Lucinidae. Dr. Britton returned to his hometown of Fort Worth, Texas in the early 1970s and accepted a faculty position in the Biology Department at Texas Christian University. His research interests then transitioned to freshwater bivalves. He surveyed Texas waters for native mussels and studied the ecology and distribution of the invasive freshwater Asian clam, *Corbicula fluminea*. Numerous survey expeditions

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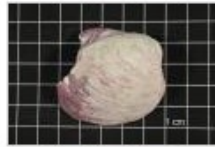
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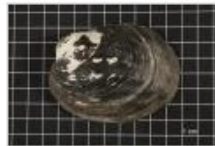
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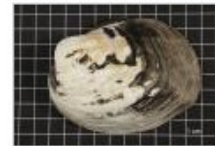
Amblema plicata, Specimen #5



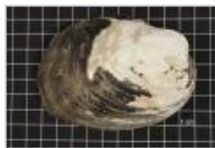
Amblema plicata, Specimen #6



Amblema plicata, Specimen #7



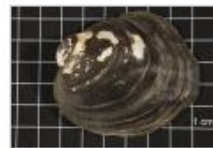
Amblema plicata, Specimen #8



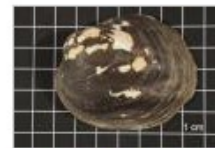
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Amblema plicata, Specimen #10



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Amblema plicata, Specimen #13



Amblema plicata, Specimen #14



Amblema plicata, Specimen #15



Amblema plicata, Specimen #16

States:

- ❖ Texas (1,385)
- ❖ South Carolina (47)
- ❖ Louisiana (29)
- ❖ Arkansas (24)
- ❖ Oklahoma (4)
- ❖ Mississippi (1)
- ❖ New Jersey (1)
- ❖ Less...

Decade:

- ❖ 2010-2019 (47)
- ❖ 2000-2009 (22)
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- ❖ 1970-1979 (1,284)
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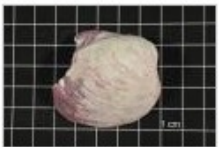
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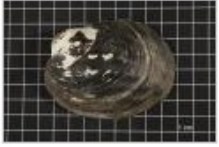
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Amblema plicata, Specimen #4



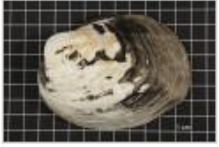
Amblema plicata, Specimen #5



Amblema plicata, Specimen #6

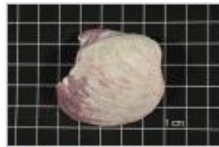


Amblema plicata, Specimen #7

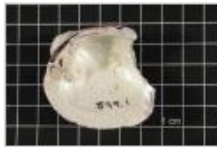


Amblema plicata, Specimen #8

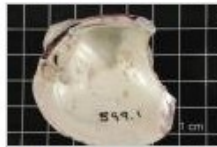
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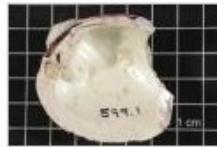
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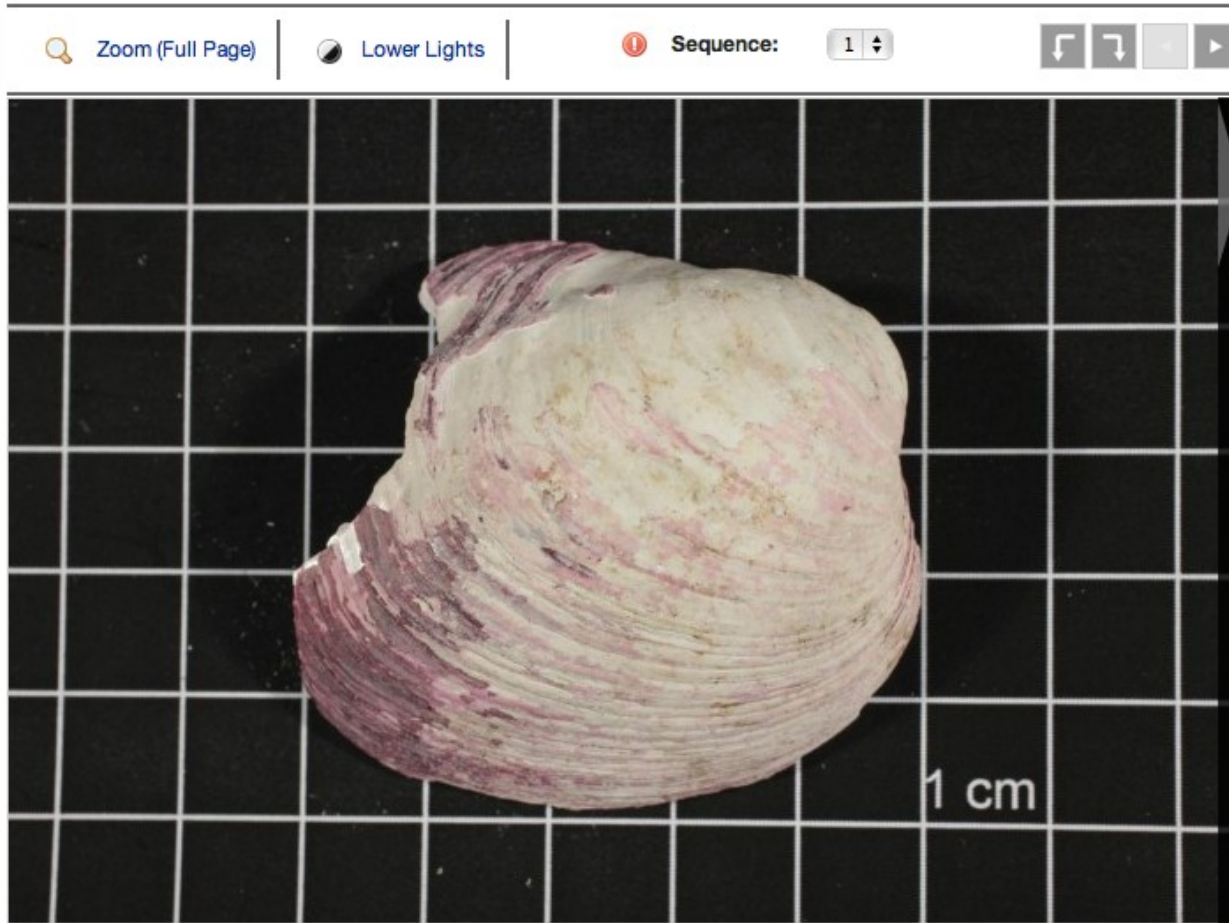
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Pettit, J.. *Amblema plicata*, Specimen #2. UNT Digital Library. <http://digital.library.unt.edu/ark:/67531/metadc34249/>.
Accessed January 20, 2012.

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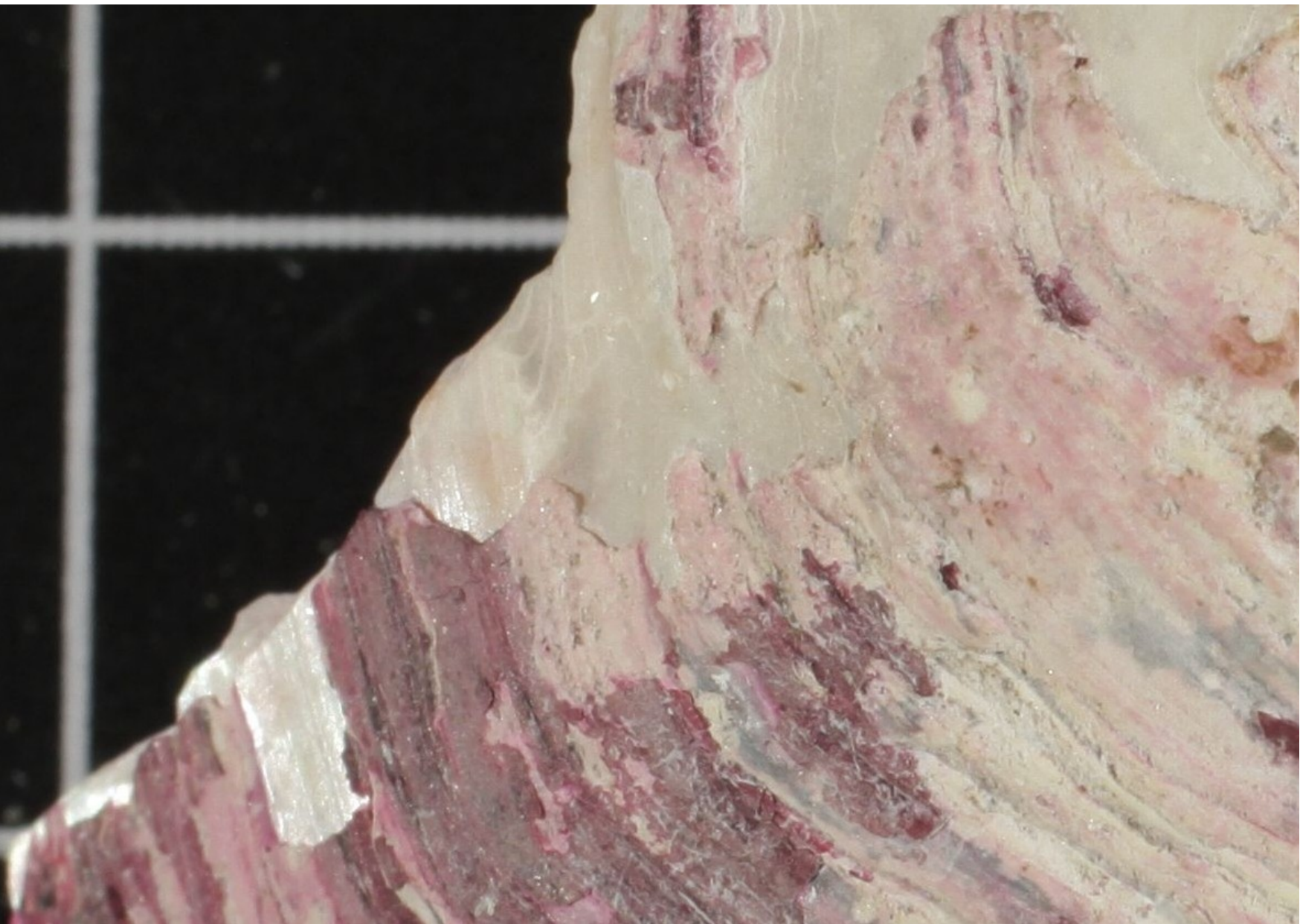
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About this Collection



These images document the disappearance of food and beverage items by photographing trays before and after schoolchildren ate lunch. The images were taken in North Texas during lunchtime in urban middle schools that participated in the National School Lunch and School Breakfast Programs.

About the Project

These photographs come from USDA-ERS Project #10.253, "Testing a Food Choice Innovation for Middle School Cafeterias," conducted from October 2010 to May 2011. Researchers were P. Connors, C. Bednar, B. Davenport, and L. Kennon.

Equipment and Procedure

Three Cannon PowerShot 1400 cameras with 8 GB memory cards were used. An apparatus forming a T-aerial was constructed using ½ inch PVC pipe with fittings and a GorillaGripper to suspend each camera at a height of two feet above a black FOAMCORE board cut to fit the top shelf of a food trolley. To position trays directly below the camera an 8x15 inch white rectangle replicating dimensions of the Genpak five-compartment Styrofoam lunch tray was outlined on the FOAMCORE board. Each apparatus was mounted on a three-shelf food trolley for easy relocation.

Latest Additions Contributors



Student Lunch Tray:
01_20110330_01A59:
Added: 06/01/2011



Student Lunch Tray:
01_20110330_01A59
Added: 06/01/2011



Student Lunch Tray:
01_20110330_01A59
Added: 06/01/2011



Student Lunch Tray:
01_20110330_01A59:
Added: 06/01/2011



Student Lunch Tray: 01_20110216_01A5603

Date: 2011-02-16

Creator: Connors, Priscilla

Description: Images taken at a North Texas middle school documenting the food on a lunch tray and the remains on the same tray after the meal was consumed. These images are part of a study to document what food students are eating.

Contributing Partner: UNT College of Merchandising, Hospitality and Tourism



Student Lunch Tray: 01_20110216_01A5606

Date: 2011-02-16

Creator: Connors, Priscilla

Description: Images taken at a North Texas middle school documenting the food on a lunch tray and the remains on the same tray after the meal was consumed. These images are part of a study to document what food students are eating.

Contributing Partner: UNT College of Merchandising, Hospitality and Tourism



Student Lunch Tray: 01_20110216_01A5607

Date: 2011-02-16

Creator: Connors, Priscilla

Description: Images taken at a North Texas middle school documenting the food on a lunch tray and the remains on the same tray after the meal was consumed. These images are part of a study to document what food students are eating.

Contributing Partner: UNT College of Merchandising, Hospitality and Tourism

Student Lunch Tray: 01_20110216_01A5612


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Description:	Images taken at a North Texas middle school documenting the food on a lunch tray and the remains on the same tray after the meal was consumed. These images are part of a study to document what food students are eating.
Creator:	Connors, Priscilla
Location:	United States - Texas
Creation Date:	2011-02-16
Partner(s):	UNT College of Merchandising, Hospitality and Tourism About Browse this Partner
Collection(s):	Documenting Plate Waste in Middle School Cafeterias Using Digital Still Photography About Browse this Collection
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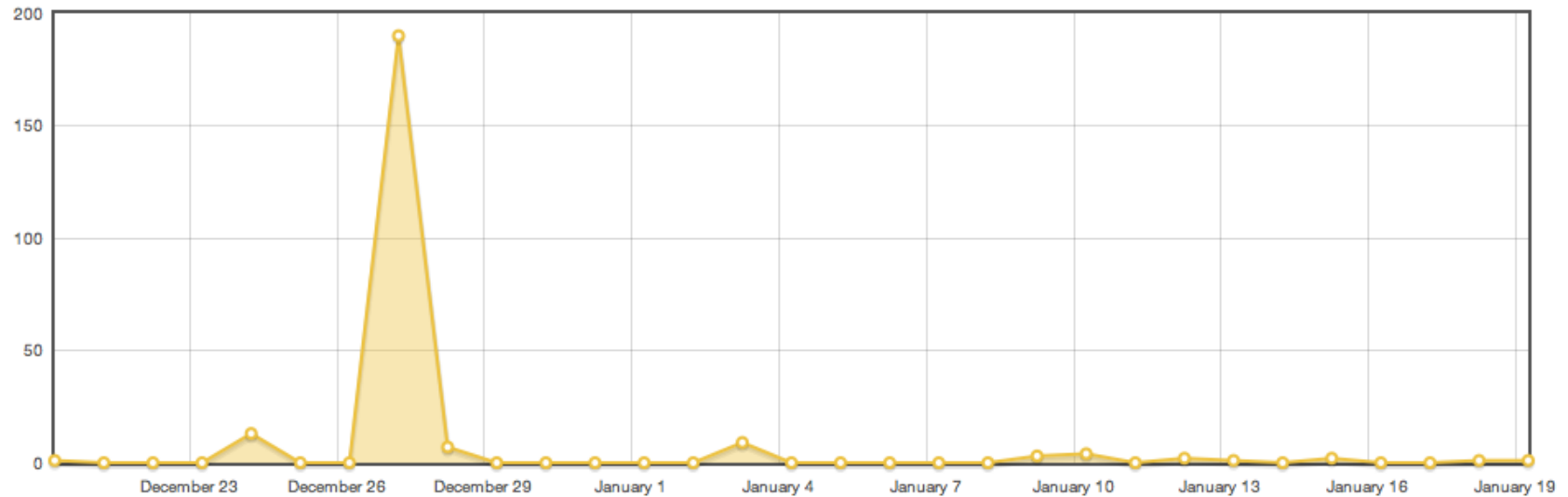
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Statistics for Documenting Plate Waste in Middle School Cafeterias Using Digital Still Photography

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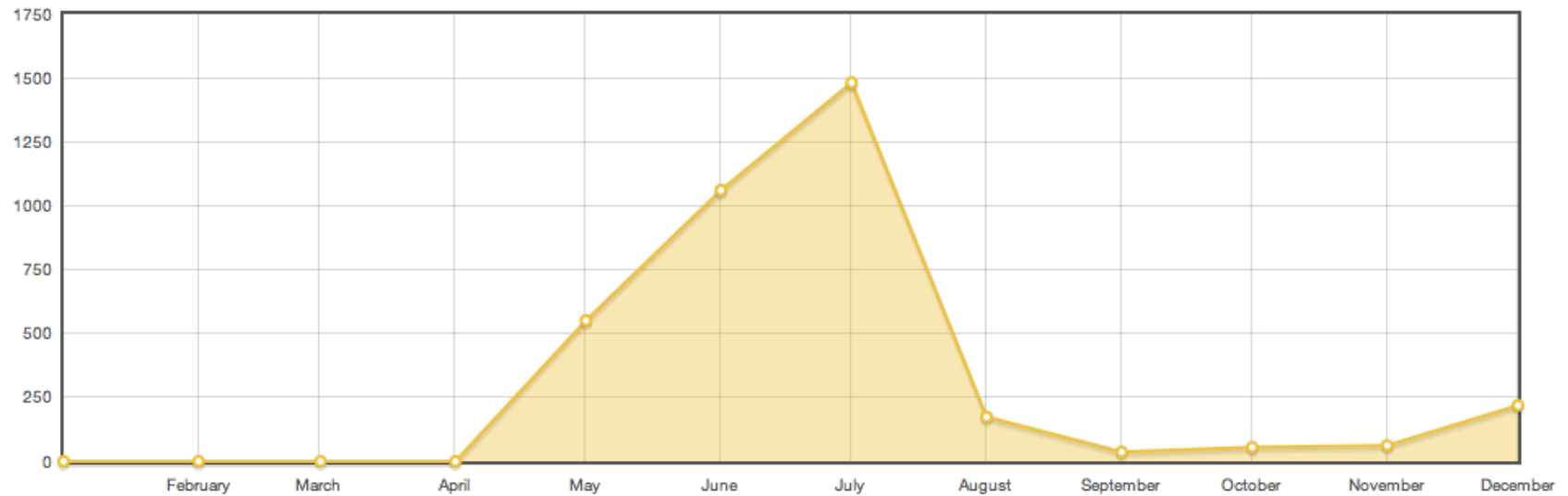
Year	January	February	March	April	May	June	July	August	September	October	November	December	Total
2012	23												23
2011	0	0	0	0	551	1,061	1,482	174	37	55	62	219	3,641

Statistics for Documenting Plate Waste in Middle School Cafeterias Using Digital Still Photography

Item Usage

More Data

3,664 Total Uses / **1,414** Total Items (2,830 files) / **1,414** Visible / **0** Hidden



Usage by Month/Year

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total
2012	23												23
2011	0	0	0	0	551	1,061	1,482	174	37	55	62	219	3,641

Lessons learned so far...

Grant funding gets people excited.

“if there is money involved we can do anything”

But...

How do we support “unfunded” project?

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JAC Audio Interview:
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Added: 09/03/2011

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1984 December
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This collection features images from Professor Ray Gough's travels to Europe, the Middle East, and the Orient. Included are images of architecture, archaeological sites, and pottery workshops and kilns.

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The Activator, Volume 2, Number 2, November 1945

Added: 12/07/2011



The Activator, Volume 2, Number 1, October 1945

Added: 12/07/2011



[The Activator], Volume 1, Number 1, October 1944

Added: 12/07/2011

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This publication of the Dallas-Fort Worth Section of the American Chemical Society includes information about research, prominent scientist, organizational business, and various other stories of interest to the community. Published monthly during long academic semesters. This special issue includes a full program for the events of the society's regional meeting at the University of Texas as well as descriptions of local attractions and special programs.

Creator:

[American Chemical Society. Dallas/Fort Worth Section.](#)

[Abbott, H. E.](#)

Location:

[United States - Texas - Travis County - Austin](#)

Creation Date:

1945-12

Partner(s):

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