

LAW REPOSITORIES
SHAPING the FUTURE

Shaping the Repository



Woodlands Conference Center, Williamsburg, Virginia

Hosted by College of William and Mary

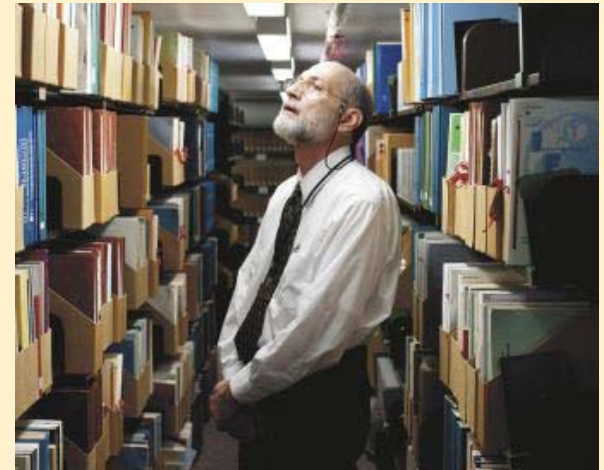
March 30-31, 2015

This conference is made possible by a grant from the AALL/Bloomberg Continuing Education Grants Program
and by the sponsorship of bepress and LIPA.

Presenter:

Paul Royster

Coordinator of Scholarly Communications
University of Nebraska-Lincoln



Manager, <http://digitalcommons.unl.edu>

Institutional Repository (IR) established 2005

850 series, 255 communities

78,250 documents

28.5 million downloads (to date)

Our University



- Established 1869
- 6 blocks from state capitol
- 24,500 students, 1650 faculty, 3700 staff
- Degrees awarded: 3700 BA, 800 master's, 300 PhDs
- Annual budget: \$ 1.2 billion
- Research budget: \$ 250 million
- Library budget: \$ 15 million



Why repositories are critical:

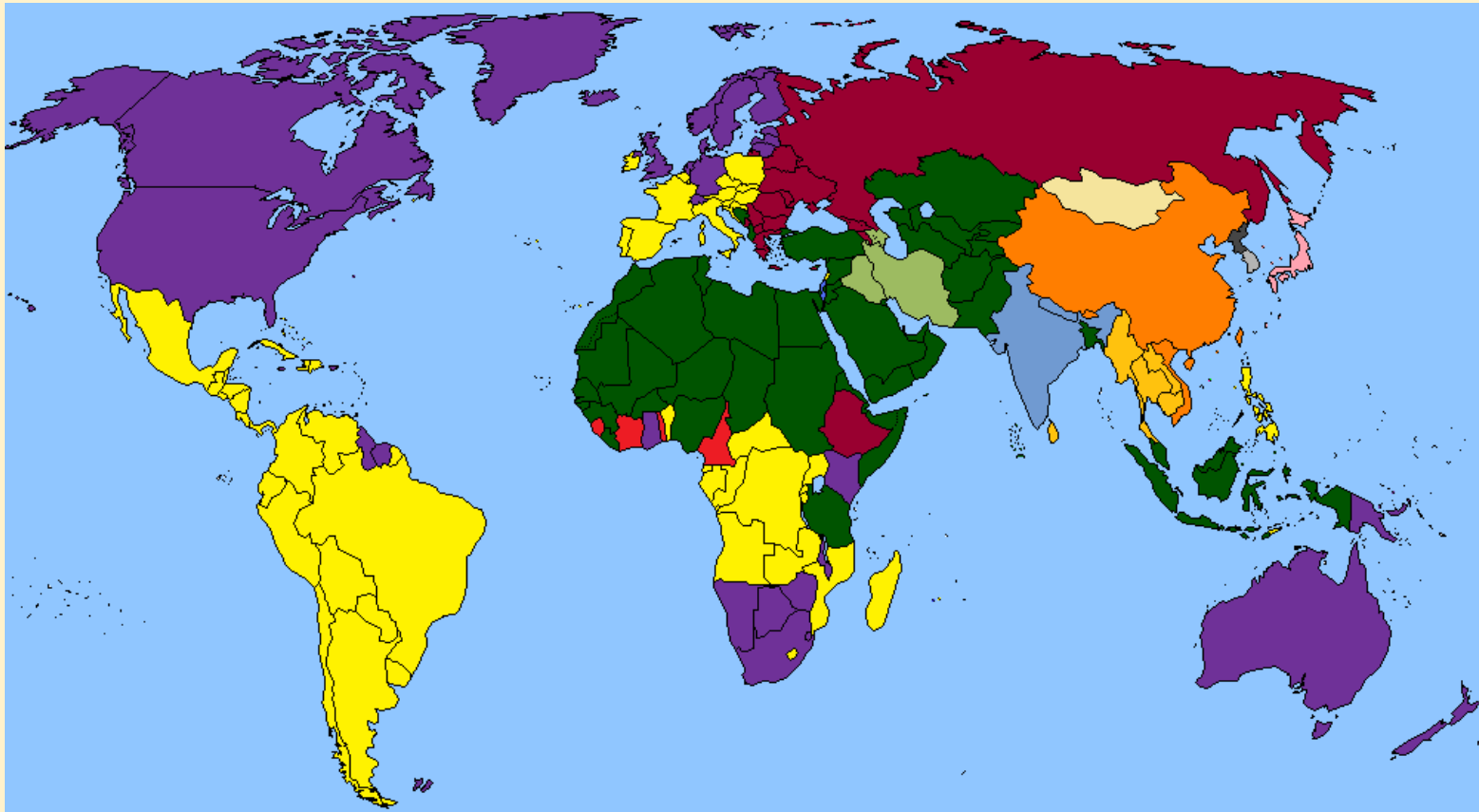
Budgets are down, acquisitions are down, foot traffic is down, reference visits are down, ...

How can we relate to the faculty—other than to say “We have cancelled your favorite journal”?



Why repositories are critical:

We want to share ideas and experience, especially our educational, legal, and political experience.



What is the repository, really ?

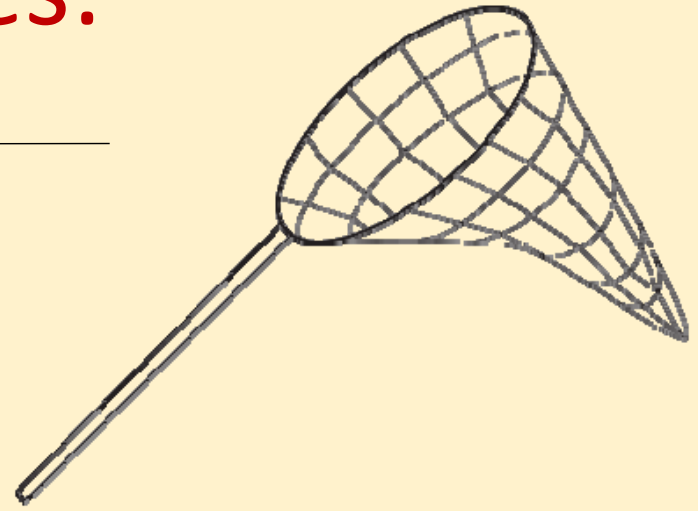
- not the servers or hardware or software
- not the staff
- but the set of services it provides

“Opportunity is missed by most people because it is dressed in overalls and it looks like work.” — Thomas Edison



There are two roles:

1. Collection



2. Dissemination





Svalbard
Global Seed Vault

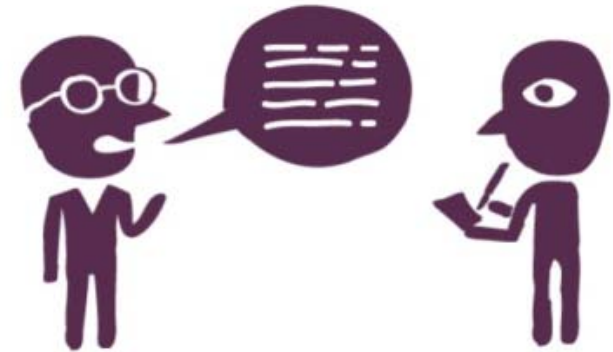




Noah's Ark, Simon de Myle, 1570

“Expert” Advice

1. Use open source software
2. Expect faculty to self-archive
3. Seek campus “mandate” or deposit policy
4. Promote author-rights addendum
5. Provide funds for gold OA fees
6. Participate in Open Access events
7. Promote Creative Commons licenses
8. Require peer review for original publishing
9. Assign all possible identifiers



We have followed none of this advice.

I could go through each one and explain why,
but I only have 45 minutes.



Instead, I will describe the road we have taken,
and where it has led us:

1. Provide services
2. Make it easy
3. Give immediate feedback
4. Maximize content upload
5. The IR belongs to the depositors



<http://www.corcohighways.org/highways/wy/wyroutes/?p=2683>

1. Services provided:

permissions & copyright clearance

hunting & gathering

scanning

typesetting

metadata-ing

uploading & posting

usage reporting

promoting

POD publishing



“Beyond Mediated Deposit”

2. Participation made easy

“Send us your vita, and let us do the rest.”



3. Immediate Feedback



From: DigitalCommons@University of Nebraska - Lincoln, Digital Commons, and Journal of Librarianship and Scholarly Communication

Dear Author,

You had **6760** new downloads in February 2015 across your **261** papers in DigitalCommons@University of Nebraska - Lincoln, Digital Commons, and Journal of Librarianship and Scholarly Communication.

Your current readership:

393365 Total Downloads



Automatic monthly reports. Detail down to article level.

4. Maximize Content Upload

This may seem obvious, but it bears emphasizing:

If you are not posting documents, you are not approaching the goal → 100% of scholarship freely accessible online.

This is how the struggle to free scholarly communications will be won.

Our mission: Shovel as much free content as possible onto the Internet.



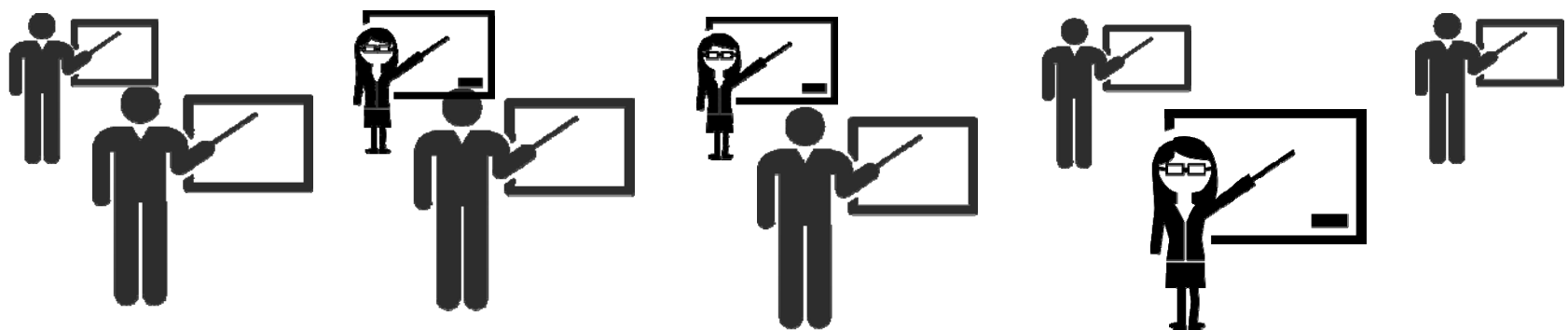
5. The IR belongs to the faculty

Not to the library; not to the university; not to the public.

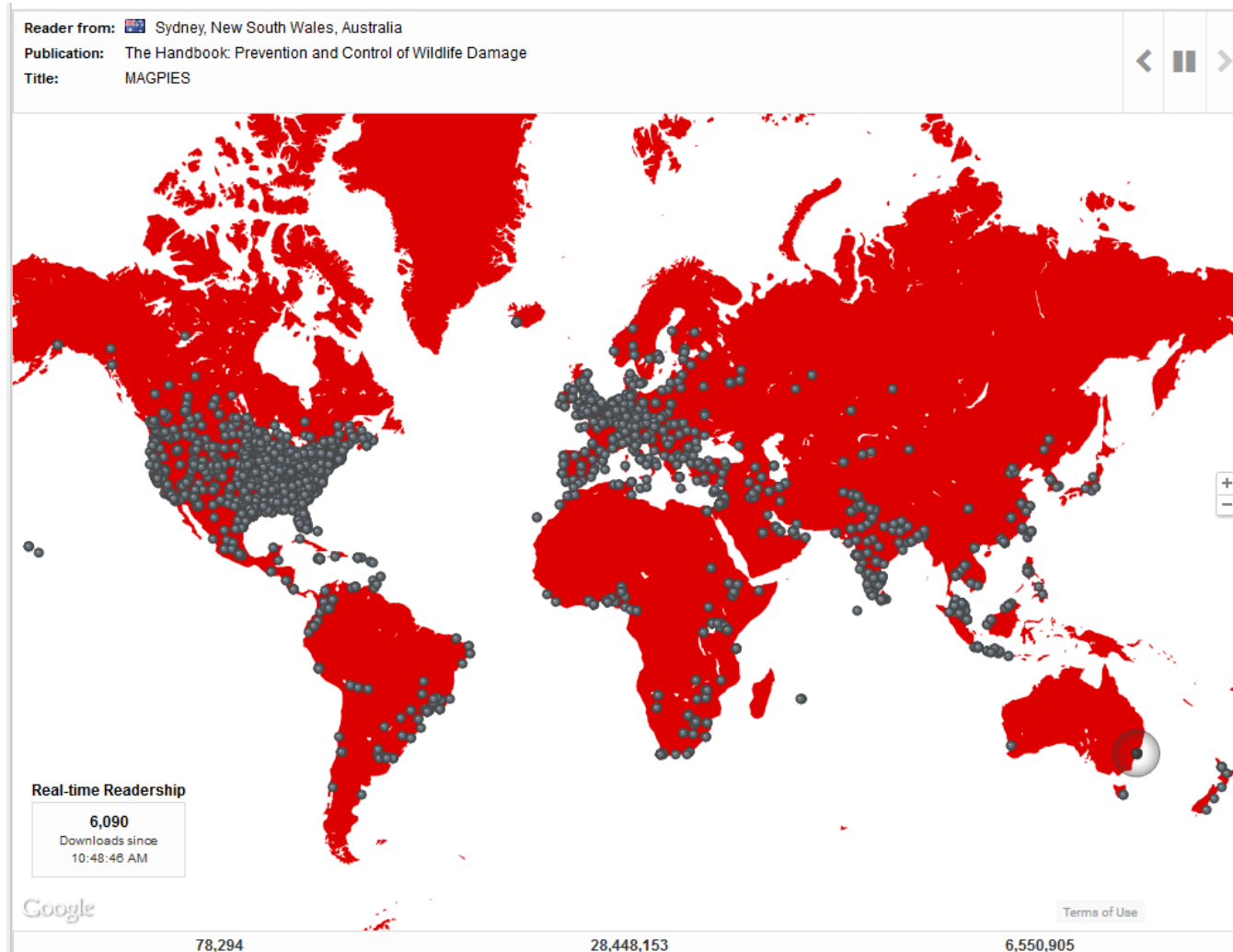
All policies derive from this principle.

We are not gatekeepers, arbiters, enforcers, approvers, censors, regulators, or judges.

We do not use the IR to track faculty grants or productivity.



Our function: disseminate faculty content,
as widely as possible



Have we been successful ?

2nd-largest institutional repository in
United States (after Michigan's "Deep Blue")

78,000 full-text documents

- 65,000 free access
- 13,000 campus-only ETDs

28 million downloads since 2005

- 6 million in past year,
or 500,000/month
- to more than 210 countries



In recognition, I have
awarded us this
trophy.

We are the university's most visited subdomain



Subdomain	Percent of Visitors
digitalcommons.unl.edu	11.68%
unl.edu	7.90%
droughtmonitor.unl.edu	6.88%
lancaster.unl.edu	5.53%
cse.unl.edu	4.50%
food.unl.edu	4.04%
dwb4.unl.edu	3.65%
ianrpubs.unl.edu	3.39%
cba.unl.edu	2.57%
dwb.unl.edu	2.12%

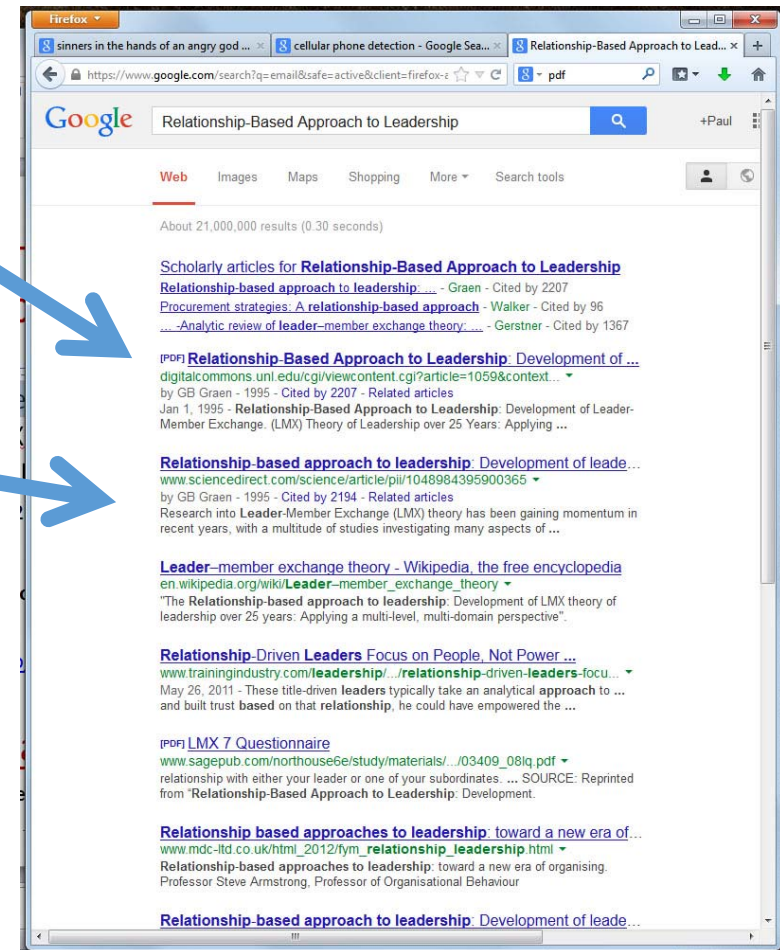
Source: <http://www.alexacom/siteinfo/unl.edu#trafficstats> (5/27/2014)

Our content ranks above Elsevier's in Google search results

UNL DigitalCommons
version of article

Elsevier version
of same article

*(Because we get more traffic
than the subscription and
paywall sites.)*



We have more faculty participation than we can handle

Our staff:

3 librarians, full time

3 work-study student assistants



Candy Hermosillo is a sophomore from Cozad, Nebraska (pop. 3977).
I said I would make her famous.

Faculty repeat participation rate: 99%

If we can get one article from Professor X, there is a 99% chance he will come back with more.



We typeset our author versions to match the pagination and layout of the publisher versions.

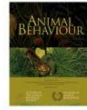
Animal Behaviour 86 (2013) 409–415



Contents lists available at SciVerse ScienceDirect

Animal Behaviour

journal homepage: www.elsevier.com/locate/anbehav



Experimental confirmation that avian plumage traits function as multiple status signals in winter contests

Alexis S. Chaine^{a,*}, Allison M. Roth^{b,c}, Daizaburo Shizuka^{b,d}, Bruce E. Lyon^b

^a Station d'Ecologie Expérimentale du CNRS, USR2936, Moulis, France

^b Department of Ecology and Evolutionary Biology, University of California, Santa Cruz, CA, USA

^c Cincinnati, OH, USA

^d School of Biological Sciences, University of Nebraska, Lincoln, NE, USA

ARTICLE INFO

Article history:

Received 16 February 2013
Initial acceptance 15 March 2013
Final acceptance 25 April 2013
Available online 27 June 2013
MS. number: 13-00144R

Keywords:

carotenoid
experimental
golden-crowned sparrow
manipulation
melanin
multiple signals
social dominance
status signal
winter sociality
Zonotrichia atricapilla

Status signals are thought to reduce costs of overt conflict over resources by advertising social status or an individual's ability to win contests. While most studies have focused on single badges of status, recent empirical work has shown that multiple status signals may exist. To provide robust evidence for multiple badges of status, an experimental manipulation is required to decouple signals from one another and from other traits linked to fighting ability. Such experimental evidence is lacking for most studies of multiple status signals to date. We previously found that two plumage traits in golden-crowned sparrows, *Zonotrichia atricapilla*, were correlated with social dominance in encounters between unfamiliar individuals. To confirm that each plumage patch functions as an independent status signal, we experimentally augmented the sizes of the gold crown patch and the black crown patch during encounters between unfamiliar individuals with similar premanipulation crown sizes. In nearly all cases, the individual with the artificially augmented gold or black crown was dominant during the trial and manipulations of each colour were equally successful in conferring dominance. The relative differences in crown sizes between manipulated and unmanipulated individuals in a dyad and mismatches in crown sizes of the manipulated bird led to escalation in gold trials, but these same factors were not significant for black trials. This study provides unequivocal evidence for multiple status signals: both black and gold crown patches influence social status *per se* and they do so independently of the other crown patch.

© 2013 The Association for the Study of Animal Behaviour. Published by Elsevier Ltd. All rights reserved.

Physical conflict over limited resources can be costly in terms of both time and health. These costs can favour the evolution of signals that can resolve conflicts without physical aggression, namely 'status signals' or 'badges of status' (Rohwer 1975, 1977; Maynard Smith & Harper 2003). Numerous studies identify traits that function as status signals, in both breeding and nonbreeding contexts, and for a wide diversity of taxonomic groups (Senar 1999, 2006; Whiting et al. 2003; Tibbetts & Safran 2009). Nearly all studies of status signals to date have focused on investigating a single trait or badge that indicates dominance in a given species (Senar 2006; Tibbetts & Safran 2009), in contrast to multiple signals. This may be due to the assumption that status signals should be directly linked to fighting ability and that a single badge should be sufficient to convey this information. In contrast, studies of traits selected through mate choice have focused on multiple signals for the past

two decades (Møller & Pomiankowski 1993; Marchetti 1998; Andersson et al. 2002; Uetz & Roberts 2002; Candolin 2003; Doucet & Montgomerie 2003; Chaine & Lyon 2008a; Dunn et al. 2008). In this context, receivers are thought to benefit from attending to a number of different traits that reflect different aspects of individual quality ('multiple messages') in a mate, or if multiple cues aid in more accurate assessment of quality ('backup cues'; Marchetti 1998; Rowe 1999; Candolin 2003). However, signalling in nonmating contexts should entail similar selection pressures as sexual signalling and thus could resemble sexual signals in many respects (West-Eberhard 1983; Lyon & Montgomerie 2012). Indeed, recent evidence from a few species suggests that multiple status signals also occur in contexts other than mate choice (Bókonyi et al. 2006; Chaine & Lyon 2008b; Chaine et al. 2011) and that they could be more common than previously thought.

Status signals have been particularly well studied in birds, yet studies that investigate the function of multiple status signals are rare. In dark-eyed juncos, *Junco hyemalis* (Balph et al. 1979), two traits were found to correlate with social dominance, but it was

* Correspondence: A. S. Chaine, Station d'Ecologie Expérimentale du CNRS, USR2936, 09200 Moulis, France.
E-mail address: alexis.chaine@ceceex-moulis.cnrs.fr (A. S. Chaine).

Published in *Animal Behaviour* 86:2 (August 2013), pp. 409–415; doi:10.1016/j.anbehav.2013.05.034

Copyright © 2013 The Association for the Study of Animal Behaviour. Published by Elsevier Ltd. Used by permission.
Submitted February 16, 2013; revised March 15, 2013; accepted April 25, 2013; published online June 27, 2013.



Experimental confirmation that avian plumage traits function as multiple status signals in winter contests

Alexis S. Chaine¹, Allison M. Roth^{2,3}, Daizaburo Shizuka^{2,4} and Bruce E. Lyon²

¹ Station d'Ecologie Expérimentale du CNRS, USR2936, Moulis, France

² Department of Ecology and Evolutionary Biology, University of California, Santa Cruz, CA, USA

³ Cincinnati, OH, USA

⁴ School of Biological Sciences, University of Nebraska-Lincoln, Lincoln, NE, USA

Corresponding author — A. S. Chaine, Station d'Ecologie Expérimentale du CNRS, USR2936, 09200 Moulis, France.
email alexis.chaine@ceceex-moulis.cnrs.fr

Abstract

Status signals are thought to reduce costs of overt conflict over resources by advertising social status or an individual's ability to win contests. While most studies have focused on single badges of status, recent empirical work has shown that multiple status signals may exist. To provide robust evidence for multiple badges of status, an experimental manipulation is required to decouple signals from one another and from other traits linked to fighting ability. Such experimental evidence is lacking for most studies of multiple status signals to date. We previously found that two plumage traits in golden-crowned sparrows, *Zonotrichia atricapilla*, were correlated with social dominance in encounters between unfamiliar individuals. To confirm that each plumage patch functions as an independent status signal, we experimentally augmented the sizes of the gold crown patch and the black crown patch during encounters between unfamiliar individuals with similar premanipulation crown sizes. In nearly all cases, the individual with the artificially augmented gold or black crown was dominant during the trial and manipulations of each color were equally successful in conferring dominance. The relative differences in crown sizes between manipulated and unmanipulated individuals in a dyad and mismatches in crown sizes of the manipulated bird led to escalation in gold trials, but these same factors were not significant for black trials. This study provides unequivocal evidence for multiple status signals: both black and gold crown patches influence social status *per se* and they do so independently of the other crown patch.

Keywords: carotenoid, experimental, golden-crowned sparrow, manipulation, melanin, multiple signals, social dominance, status signal, winter sociality, *Zonotrichia atricapilla*

Physical conflict over limited resources can be costly in terms of both time and health. These costs can favor the evolution of signals that can resolve conflicts without physical aggression, namely 'status signals' or 'badges of status' (Rohwer 1975, 1977; Maynard Smith & Harper 2003). Numerous studies identify traits that function as status signals, in both breeding and nonbreeding contexts, and for a wide diversity of taxonomic groups (Senar 1999, 2006; Whiting et al. 2003; Tibbetts & Safran 2009). Nearly all studies of status signals to date have focused on investigating a single trait or badge that indicates dominance in a given species (Senar 2006; Tibbetts & Safran 2009), in contrast to multiple signals. This may be due to the assumption that status signals should be directly linked to fighting ability and that a single badge should be sufficient to convey this information. In contrast, studies of traits selected through mate choice have focused on multiple signals for the past two decades (Møller & Pomiankowski, 1993; Marchetti 1998; Andersson et al., 2002; Uetz & Roberts, 2002; Candolin, 2003; Doucet & Montgomerie, 2003; Chaine

and Lyon, 2008a; Dunn et al., 2008). In this context, receivers are thought to benefit from attending to a number of different traits that reflect different aspects of individual quality ('multiple messages') in a mate, or if multiple cues aid in more accurate assessment of quality ('backup cues'; Marchetti, 1998; Rowe, 1999; Candolin, 2003). However, signaling in nonmating contexts should entail similar selection pressures as sexual signaling and thus could resemble sexual signals in many respects (West-Eberhard, 1983; Lyon & Montgomerie, 2012). Indeed, recent evidence from a few species suggests that multiple status signals also occur in contexts other than mate choice (Bókonyi et al., 2006; Chaine and Lyon, 2008b; Chaine et al., 2011) and that they could be more common than previously thought.

Status signals have been particularly well studied in birds, yet studies that investigate the function of multiple status signals are rare. In dark-eyed juncos, *Junco hyemalis* (Balph et al. 1979), two traits were found to correlate with social dominance, but it was unclear whether the two signals function dif-

Exploit the “Public Domain”

Works by United States government employees
are not subject to copyright.

Our university has research programs with USDA, USGS, USF&WS, NOAA, NASA, NIH, CDC, which we actively harvest and re-post.

Many publishers improperly attach copyright notices to such works. These are erroneous and without force.



“State Sovereign Immunity”

Under the 11th Amendment (1795) to the US Constitution, states (and their agencies, such as our university) are immune from being sued for damages in federal court.

We do not abuse this, but it serves as a safety net in case of unintentional violation.

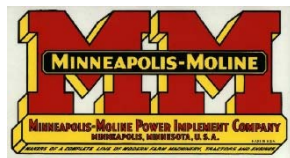


The Story of the Tractor Tests



JOHN DEERE

 **BELARUS**



J.I. CASE



FARM MACHINERY



Zetor



- 1918 Fast-talking Eastern salesman sells no-count tractor to honest and unsuspecting Nebraska farmer.
- 1919 Nebraska Legislature passes Tractor Test Law requiring all tractors sold in state to be tested at university lab.
- 1998 University establishes Lester F. Larsen Tractor Test Museum.
- 2007 Museum webmaster invites me to visit.

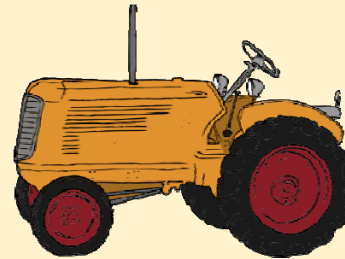
Lester F. Larsen Tractor Test & Power Museum



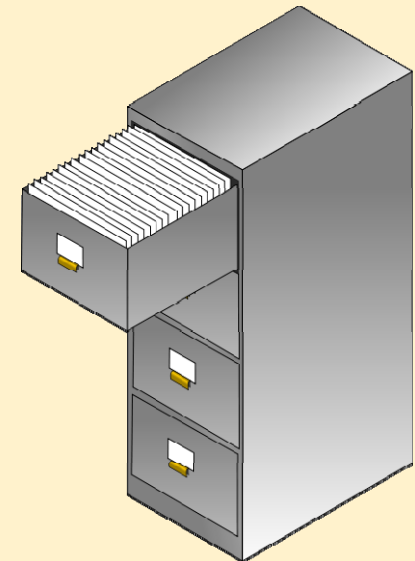
- Old barn & shed on ag campus



- Old farm equipment



- Room-full of paper files
(88 years of test reports)



NEBRASKA TRACTOR TEST 760 - JOHN DEERE 4010 LPG

The University of Nebraska Agricultural Experiment Station
E. F. Frolik, Dean and Acting Director, Lincoln, Nebraska

POWER TAKE-OFF PERFORMANCE

Hp	Crank shaft speed rpm	Fuel Consumption gal per hr	Hp-hr per gal	Temp Degrees F Cool- ing med	Air wet bulb	Barometer inches of mercury
MAXIMUM POWER AND FUEL CONSUMPTION						
Rated Engine Speed—Two Hours						
80.60	2200	9.242	0.487	8.72	190	61 75 28.988
Standard Power Take-off Speed (1000 rpm)—One Hour						
72.82	1900	8.089	0.472	9.00	190	61 75 29.010
VARYING POWER AND FUEL CONSUMPTION—TWO HOURS						
71.00	2280	8.075	0.483	8.79	178	61 74
0.00	2463	3.049	.....	155	62	77
36.05	2314	6.092	0.719	5.91	159	62 76
80.43	2200	9.296	0.491	8.65	188	62 77
18.82	2420	4.511	1.019	4.17	158	61 76
53.48	2289	6.946	0.552	7.70	160	62 76
Av 43.30	2328	6.329	0.621	6.84	166	61 76 29.007

DRAWBAR PERFORMANCE

Hp	Draw- bar pull lbs	Speed miles per hr	Crank shaft speed rpm	Slip of driv- ers	Fuel Consumption gal per hr	Hp-hr per gal	Temp Degrees F Cool- ing med	Air wet bulb	Barometer inches of mercury
VARYING DRAWBAR POWER AND FUEL CONSUMPTION WITH BALLAST									
Maximum Available Power—Two Hours—5th Gear									
71.77	4691	5.74	2204	5.55	9.115	0.540	7.87	182	66 78 28.660
75% of Pull at Maximum Power—Ten Hours—5th Gear									
57.11	3506	6.11	2300	3.62	7.520	0.560	7.59	156	61 68 28.879
50% of Pull at Maximum Power—Two Hours—5th Gear									
39.50	2379	6.73	2315	2.55	6.455	0.695	6.12	157	65 71 28.905
MAXIMUM POWER WITH BALLAST									
61.00	6741	3.39	2294	14.30	3rd Gear	.....	156	53	58 28.865
70.39	6021	4.38	2200	10.09	4th Gear	.....	160	53	58 28.865
72.13	4767	5.67	2205	6.65	5th Gear	.....	162	55	62 28.865
71.68	3526	7.62	2199	4.11	6th Gear	.....	166	61	68 28.825
72.24	2708	10.00	2210	3.16	7th Gear	.....	162	64	70 28.825
MAXIMUM POWER WITHOUT BALLAST									
69.51	4989	5.23	2223	14.57	5th Gear	.....	160	53	56 28.950
VARYING DRAWBAR PULL AND TRAVEL SPEED WITH BALLAST—5th Gear									
Pounds pull	4750	4850	4900	4900	4950	4900			
Horsepower	72.1	66.0	58.8	52.3	44.9	37.9			
Miles per hour	5.7	5.1	4.5	4.0	3.4	2.9			

TIRES, BALLAST AND WEIGHT

	With Ballast	Without Ballast
Rear tires	No. size, ply & psi	Two 15.5-38;6;14
Ballast	Liquid	553 lb each
	Cast iron	700 lb each
Front tires	No. size, ply & psi	Two 6.00-16;6;40
Ballast	Liquid	None
	Cast iron	None
Freight of drawbar	18 inches	18 inches
Static weight	Rear	7320 lb
	Front	2240 lb
Total weight with operator	9735 lb	7280 lb

Department of Agricultural Engineering
Dates of Test: September 12 to September 23, 1960
Manufacturer: JOHN DEERE WATERLOO TRAC-
TOR WORKS, WATERLOO, IOWA
Manufacturer's Power Rating: 80 PTO Horsepower
(observed)

FUEL, OIL and Time Fuel commercial propane
Specific gravity converted to 60°/60° 0.5103 Weight
per gallon 4.25 lb Oil SAE 20-20W API service classi-
fication ML, MM, MS, DG-7b motor 1.571 gal
Drained from motor 1.098 gal Transmission and
final-drive lubricant John Deere Special 303 oil Total
time engine was operated 49 hours.

ENGINE Make John Deere LPG Type 6 cylinder
vertical Serial No 22E 1405 Crankshaft mounted
lengthwise Rated rpm 2200 Bore and stroke 4" x 4"
Compression ratio 9.0 to 1 Displacement 302 cu in
Carburetor size 1 1/8" Ignition system battery Crank-
ing system 12 volt electric Lubrication pressure Air
cleaner oil washed wire screen Oil filter full flow
replaceable paper element Oil cooler radiator for trans-
mission and hydraulic Oil Fuel filter felt pack in fuel
lock strainer Muffler was used Cooling medium tem-
perature control two thermostats.

CHASSIS Type tricycle Serial No 21T 1530 Tread
width rear 60" to 88" front 8 1/2" to 18 1/2" Wheel
base 96 1/2" Center of gravity (without operator or
ballast with minimum tread, with fuel tank filled
and tractor serviced for operation) Horizontal dis-
tance forward from center-line of rear wheels 31.2"
Vertical distance above roadway 37" Horizontal dis-
tance from center of rear wheel tread 0" to the
right/left Hydraulic control system direct engine
drive Transmission selective gear Fixed ratio partial
range synchro-mesh Advertised speeds mph (at 1900
rpm) first 1 1/2 second 2 1/2 third 3 1/4 fourth 4 1/4
fifth 5 1/4 sixth 6 1/4 seventh 8 1/4 eighth 14 1/4 reverse
first 3 1/4 second 5 third 8 1/4 Clutch dry disc operated
by foot pedal Brakes wet disc hydraulically power
actuated operated by foot pedals Steering power as-
sisted Turning radius (on concrete surface with
brake) right 120° left 120° (on concrete surface
without brake) right 146° left 146° Turning space
diameter (on concrete surface with brake applied)
right 283" left 283" (on concrete surface without
brake) right 335" left 335" Belt pulley 967 rpm at
1900 engine rpm diam 12" face 8 1/2" Belt speed
3035 fpm Power take-off 1003 rpm at 1900 engine
rpm.

REPAIRS AND ADJUSTMENTS No repairs or ad-
justments.

REMARKS All test results were determined from
observed data obtained in accordance with the SAE
and ASAE test code.

First and second gears were not run as it was
necessary to limit the pull in third gear to avoid
excessive wheel slippage. Eighth gear was not run
as it exceeded 15 mph.

We, the undersigned, certify that this is a true and
correct report of official Tractor Test 760.

L. F. LARSEN
Engineer-in-Charge

L. W. HURLBUT, Chairman
G. W. STEINBRUEGGE
J. J. SULEK
Board of Tractor
Test Engineers

EXPLANATION OF TEST REPORT

GENERAL CONDITIONS

Each tractor is a production model equipped for common
usage. Power consuming accessories can be disconnected only
when it is convenient for the operator to do so in practice. Ad-
ditional weight can be added as ballast if the manufacturer
regularly supplies it for sale. The static tire loads and the in-
flation pressures must conform to recommendations in the Tire
Standards published by the Society of Automotive Engineers.

PREPARATION FOR PERFORMANCE RUNS

The engine crankcase is drained and refilled with a mea-
sured amount of new oil conforming to specifications in the
operators manual. The fuel used and the maintenance opera-
tions must also conform to the published information delivered
with the tractor. The tractor is then limbered-up for 12 hours
on drawbar work in accordance with the manufacturer's pub-
lished recommendations. The manufacturer's representative is
present to make appropriate decisions regarding mechanical ad-
justments.

The tractor is equipped with approximately the amount of
added ballast that is used during maximum drawbar tests. The
tire tread-bar height must be at least 65% of new tread height
prior to the maximum power run.

BELT OR POWER TAKE-OFF PERFORMANCE

Maximum Power and Fuel Consumption. The manufac-
turer's representative makes carburetor, fuel pump, ignition and
governor control settings which remain unchanged throughout
all subsequent runs. The governor and the manually operated
governor control lever is set to provide the high-idle speed
specified by the manufacturer for maximum power. Maximum
power is measured by connecting the belt pulley or the power
take-off to a dynamometer. The dynamometer load is then
gradually increased until the engine is operating at the rated
speed specified by the manufacturer for maximum power. The
corresponding fuel consumption is measured.

Varying Power and Fuel Consumption. Six different horse-
power levels are used to show corresponding fuel consumption
rates and how the governor causes the engine to react to the
following changes in dynamometer load: 85% of the dyna-
mometer torque at maximum power; minimum dynamometer
torque, 1/2 the 85% torque; maximum power; 1/4 and 3/4 of
the 85% torque. Since a tractor is generally subjected to vary-
ing loads the average of the results in this test serve well for
predicting the fuel consumption of a tractor in general usage.

DRAWBAR PERFORMANCE

All engine adjustments are the same as those used in the
belt or power take-off tests. If the manufacturer specifies a dif-
ferent rated crankshaft speed for drawbar operations, then the
position of the manually operated governor control is changed
to provide the high-idle speed specified by the manufacturer
in the operating instructions.

Varying Power and Fuel Consumption With Ballast. The
varying power runs are made to show the effect of speed-con-
trol devices (engine governor, automatic transmissions, etc.) on
horsepower, speed and fuel consumption. These runs are
made around the entire test course which has two 180 degree

turns with a minimum radius of 50 feet. The drawbar pull is
set at 3 different levels as follows: (1) as near to the pull at
maximum power as possible and still have the tractor main-
tain the travel speed at maximum horsepower on the straight
sections of the test course; (2) 75% of the pull at maximum
power; and (3) 50% of the pull at maximum power. Prior to
1958, fuel consumption data (10 hour test) were shown only for
the pull obtained at maximum power for tractors having torque
converters and at 75% of the pull obtained at maximum power
for gear-type tractors.

Maximum Power with Ballast. Maximum power is measured
on straight level sections of the test course. Data are shown for
not more than 12 different gears or travel speeds. Some gears or
travel speeds may be omitted because of high slippage of the
traction members or because the travel speed may exceed the
safe-limit for the test course. The maximum safe speed for the
Nebraska Test Course has been set at 15 miles per hour. The
slippage limits have been set at 15% and 7% for pneumatic
tires and steel tracks or lugs, respectively. Higher slippage
gives widely varying results.

Maximum Power Without Ballast. All added ballast is re-
moved from the tractor. The maximum drawbar power of the
tractor is determined by the same procedure used for getting
maximum power with ballast. The gear (or travel speed) is
the same as that used in the 10-hour test.

Varying Power and Travel Speed with Ballast. Travel speeds
corresponding to drawbar pulls beyond the maximum power
range are obtained to show the "lugging ability" of the tractor.
The run starts with the pull at maximum power; then addi-
tional drawbar pull is applied to cause decreasing speeds. The
run is ended by one of three conditions: (1) maximum pull
is obtained, (2) the maximum slippage limit is reached, or (3)
some other operating limit is reached.

For additional information about the Nebraska Tractor
Tests write to the Department of Agricultural Engineering,
University of Nebraska, Lincoln, Nebraska.



John Deere 4010 LPG

They also had:



- Scanner



- Volunteers



- Cat



2,200 test reports went online in 2007-2008
2.8 million downloads to date
Avg = 35,000 – 40,000 per month, > 1,000/day



<http://digitalcommons.unl.edu/tractormuseumlit/>

What resources do you have access to ...

... that might have unexpected global appeal?

I had no idea the tractor tests would be at all popular, but I said “Yes” to everything and let the Internet audience decide.



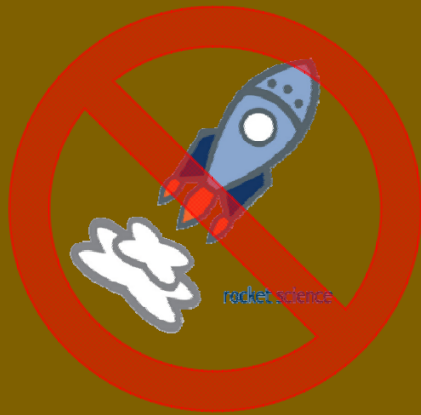
Full-Text Downloads past 90 days -- DigitalCommons@University of Nebraska - Lincoln

Series	Avg. per day
<i>Library Philosophy and Practice</i> (e-journal)	1,215
Nebraska Tractor Tests	1,067
Historical Materials from University of Nebraska-Lincoln Extension	527
<i>Great Plains Quarterly</i>	476
Electronic Texts in American Studies	436
Faculty Publications, Department of Psychology	427
Robert Katz Publications (Physics)	411
USDA National Wildlife Research Center - Staff Publications	361
Publications from USDA-ARS / UNL Faculty	352
Management Department Faculty Publications	340
Open Access Theses and Dissertations from the College of Education and Human Sciences	299
Textile Society of America Symposium Proceedings	284
USGS Staff -- Published Research	208
Agronomy & Horticulture -- Faculty Publications	201
<i>Great Plains Research: A Journal of Natural and Social Sciences</i>	185
Educational Administration: Theses, Dissertations, and Student Research	182
Faculty Publications, UNL Libraries	179
Nebraska Law Review	176
Leadership Institute Faculty Publications	139
Educational Psychology Papers and Publications	138
<i>Insecta Mundi</i>	131
Publications, Agencies and Staff of the U.S. Department of Commerce	130
Faculty Papers and Publications in Animal Science	121
Papers in Natural Resources	119
Sociology Department, Faculty Publications	115

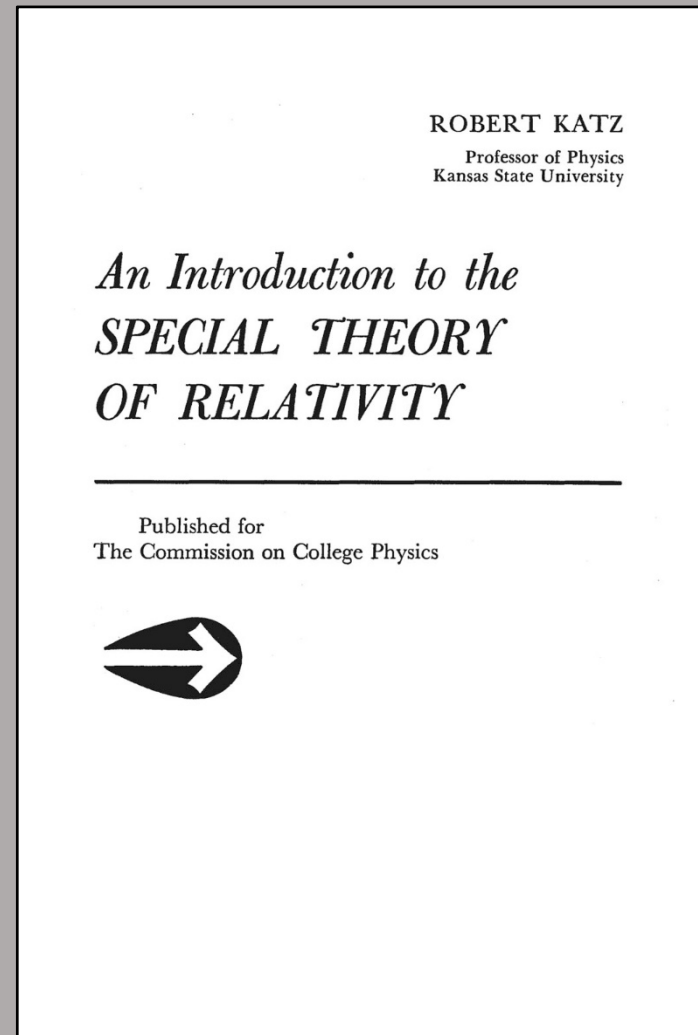
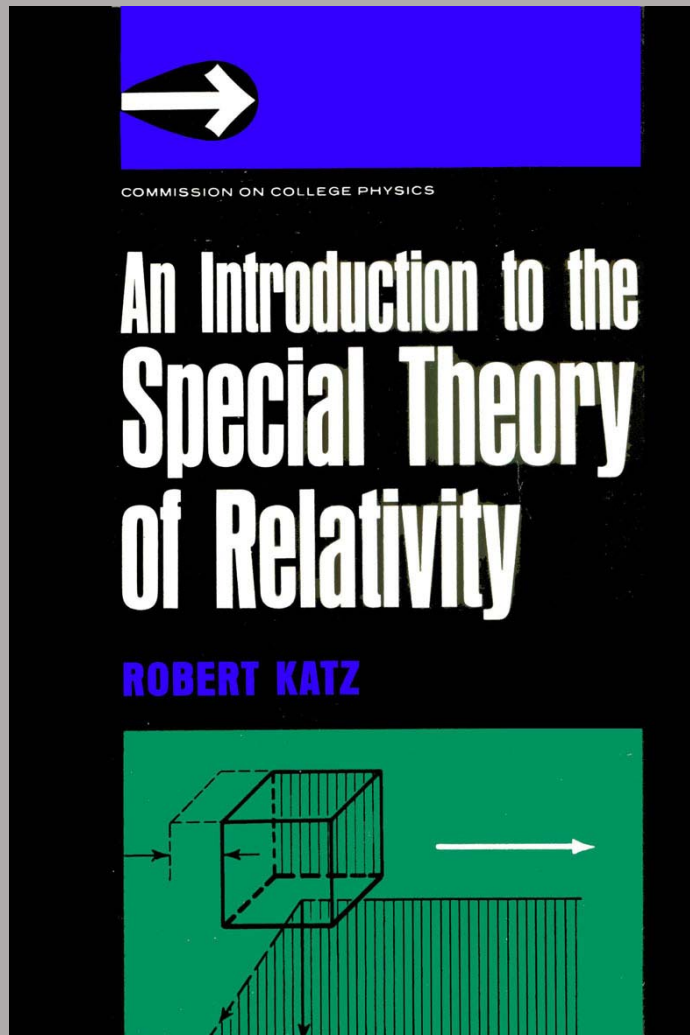


Total daily
avg. 16,567

It is the plain, humble, simple,
and homely content that gets the
widest distribution.



Except when it isn't



11,384 downloads



NEBRASKA LAW REVIEW



[HOME](#) | [BULLETIN](#) | [MY ACCOUNT](#)

[Home](#) > [Law](#) > [NLR](#)

[Follow](#)

WELCOME TO THE HOME OF THE NEBRASKA LAW REVIEW

Nebraska Law Review also publishes 'The Bulletin'. Click [here](#) to read more.

Current Issue: Volume 93, Issue 2 (2014)

- [PDF](#) [Masthead & Table of Contents, Vol. 93, No. 2](#)
- [PDF](#) [At-Will Fiduciaries? The Anomalies of a "Duty of Loyalty" in the Twenty-First Century](#)
Marian K. Riedy and Kim Hoyt Spurduto
- [PDF](#) [Exit, Voice, and Loyalty in Investment Treaty Arbitration](#)
Anna T. Katselas
- [PDF](#) [The Evolving Populisms of Antitrust](#)
Sandeep Vaheesan
- [PDF](#) [Making Second Amendment Law with First Amendment Rules: The Five-Tier Free Speech Framework and Public Forum Doctrine in Second Amendment Jurisprudence](#)
Kenneth A. Klukowski
- [PDF](#) [Ineffective Assistance of Counsel in Nebraska: The Scope of the Nebraska Supreme Court's Analysis in *State v. Rocha*, 286 Neb. 256, 836 N.W.2d 774 \(2013\), and the Effects of the Postconviction Procedural Default Rule](#)
Sarah N. Clark
- [PDF](#) [You're Breaking Up: The Faulty Connection Between Congressional Intent and Supreme Court Interpretation in *Adoptive Couple v. Baby Girl*, 133 S. Ct. 2552 \(2013\)](#)
Danielle J. Larson

[View More](#)

[Follow](#)

[Current Volume](#)

[About](#)

[Contact](#)

[Current Members](#)

[Prospective Members](#)

[Submissions](#)

[Subscriptions](#)

[How to Conduct a Search](#)

[Submit Article](#)

[Most Popular Papers](#)

[Receive Custom Email
Notices or RSS](#)

Select an issue:

All Issues

[Browse](#)

Enter search terms:

[Search](#)

in this journal

[Advanced Search](#)

Nebraska Law Review Bulletin

[The Nebraska Law Review Joins Twitter](#)

[2014 Nebraska Law Review Write-On
Competition](#)

[Regulators, Mount Up](#)

[Improving Law School "Transparency"](#)

Finally put 43+ years of backlist online.
Now getting 200+ downloads daily.

Enter search terms:

Search

in this series



[Advanced Search](#)

[Search Help](#)

[Notify me via email or RSS](#)

Links

[Law Website](#)

Browse

[Collections](#)

[Disciplines](#)

Author Corner

[Author FAQ](#)

[Home](#) > [Law](#) > [Space Law Documents](#)

Law, College of

Documents on Outer Space Law



Follow

2008

- [PDF](#)
 - [United Nations Treaties and Principles on Outer Space](#), United Nations Office for Outer Space Affairs

1995

- [PDF](#)
 - [The National Space Transportation Policy: Issues for Congress](#), U.S. Congress, Office of Technology Assessment

1990

- [PDF](#)
 - [ACCESS TO SPACE: The Future of U.S. Space Transportation Systems](#), U.S. Congress, Office of Technology Assessment
- [PDF](#)
 - [AFFORDABLE SPACECRAFT: Design and Launch Alternatives](#), U.S. Congress, Office of Technology Assessment

U.S. Department of Justice

U.S. Department of Justice Publications and Materials



FBI Files of

Aaron Swarz
Jimi Hendrix
Betty Page
Groucho Marx
Marilyn Monroe
Diana, Princess of Wales
James Brown
Walter Cronkite
Sonny Bono
Rock Hudson
Lucille Ball
Elizabeth Taylor
Ernest Hemingway
Louie, Louie (the song)



**Taking
on
some
issues**



Recruitment strategies



1. Build it & they will come.



2. Make it cool & they will come.



3. Make a rule & they will follow it.



4. Do it for them & they will approve.

Open Access



Free to access, download,
save, print, link, & make
“fair use”



Free to re-post,
re-distribute,
use commercially, &
make derivative works

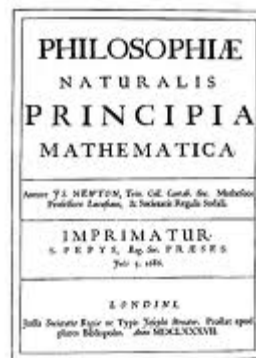


Paying for open access



Questions:

- 1) Does scholarly communication have to be a commercial transaction?



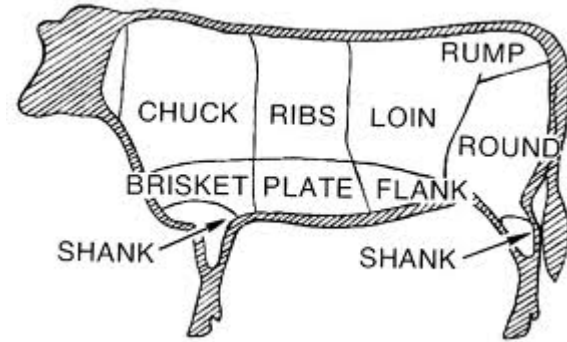
=



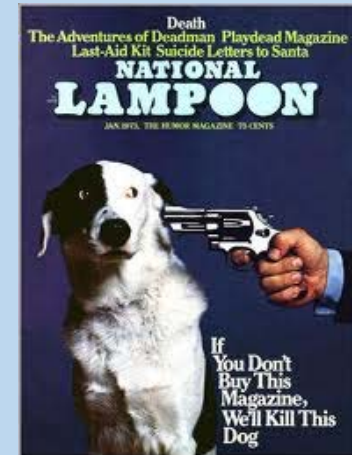
- 2) Is “open access” just a way to provide an alternate income stream for commercial publishers?



My beef with Gold and Hybrid OA:

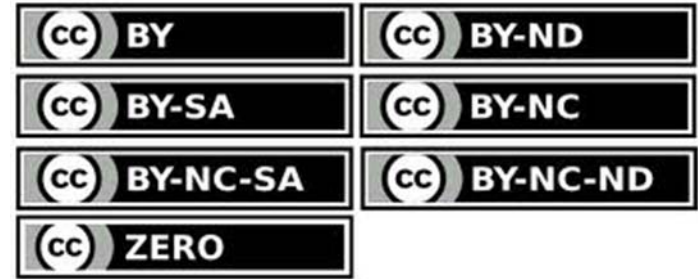


- We are giving our money to the same folks who have been holding our content for ransom for the past 50 years.



- What if we put these resources into developing our own cooperative means of production and distribution?

Creative Commons



Great for OER textbooks, teaching resources, etc.



Great, if the author wants to.



Not good as a requirement imposed on the author.



CC vs. CCC



Creative Commons

- not-for-profit corporation
- defines re-use licenses used by publishers
- no fees
- supported by grants & donations
- used for open access



Copyright Clearance Center

- not-for-profit corporation
- sets and collects usage fees for publishers
- retains a 15% commission
- funding Georgia State infringement case
- used for paywalled content



Institutional open access policies or deposit mandates

If you want to spend time and energy getting one in place, that's your choice.

We decided against it and have not regretted that.

In practice, they have all the force of a New Year's resolution.



Except your university
can end up owning
“a piece of the action”

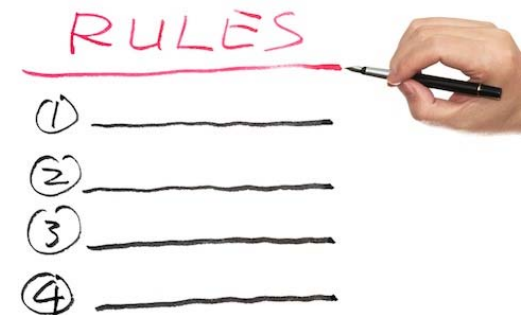
“... a nonexclusive, irrevocable, worldwide
license to exercise any and all rights
under copyright ... in any medium ... and
to authorize others to do the same.”



Our role as **Repositorians** ...



- To give scholars and researchers control over the intellectual property they create.
- Not to regulate or stipulate or legislate what they do with it.



Instead of rules and requirements,
a trust relationship.



Instead of monitors and enforcers, let librarians be partners and co-conspirators.



Summary:

A repository ...

... is not a technology program
or a collection development operation.



It is a services program and
a publishing operation.



How librarians see publishers:



Wise, inscrutable wizards wielding great powers and enchantments.

How publishers see themselves:



Noble gallant defenders of intellectual property (theirs) against scurvy pirates (us).

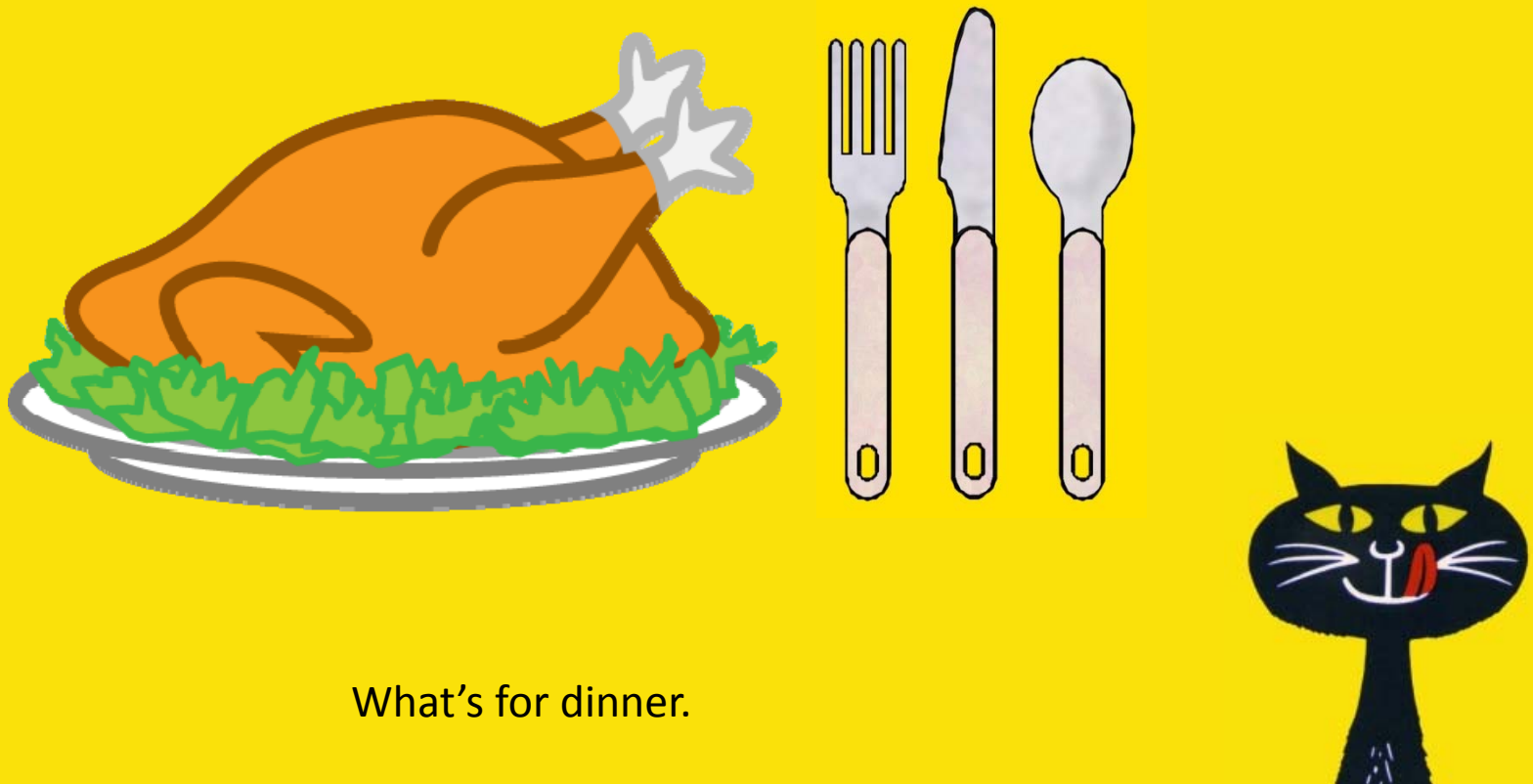
How publishers see universities:



Money Tree,
Winston Smith,
1983

Perpetually renewable sources of large funding.

How publishers see libraries:



Publishers' view of library publishing:



But we use our IR as a platform for original publishing.

Zea Books is the monograph publishing imprint of the University of Nebraska-Lincoln Libraries.



Print (on-demand) from



and via Lulu from
et al.



E-books online in institutional repository:

DigitalCommons@University of Nebraska - Lincoln

<http://digitalcommons.unl.edu/zeabook/>



"Zea" is for *Zea mays*,
commonly known as
"corn."

Production Tools



MS Word/Office

editing, fonts

Adobe Acrobat

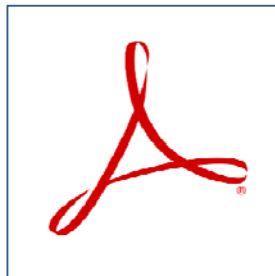
manipulate PDF's

Adobe Photoshop

manipulate graphics

Adobe InDesign

layout text & graphics



33 titles to date

- 9 in 2013; 4 in 2014; 3 in 2015 (so far)
- plus 14 in Am.Studies E-texts series

2013 income = \$ 3,545

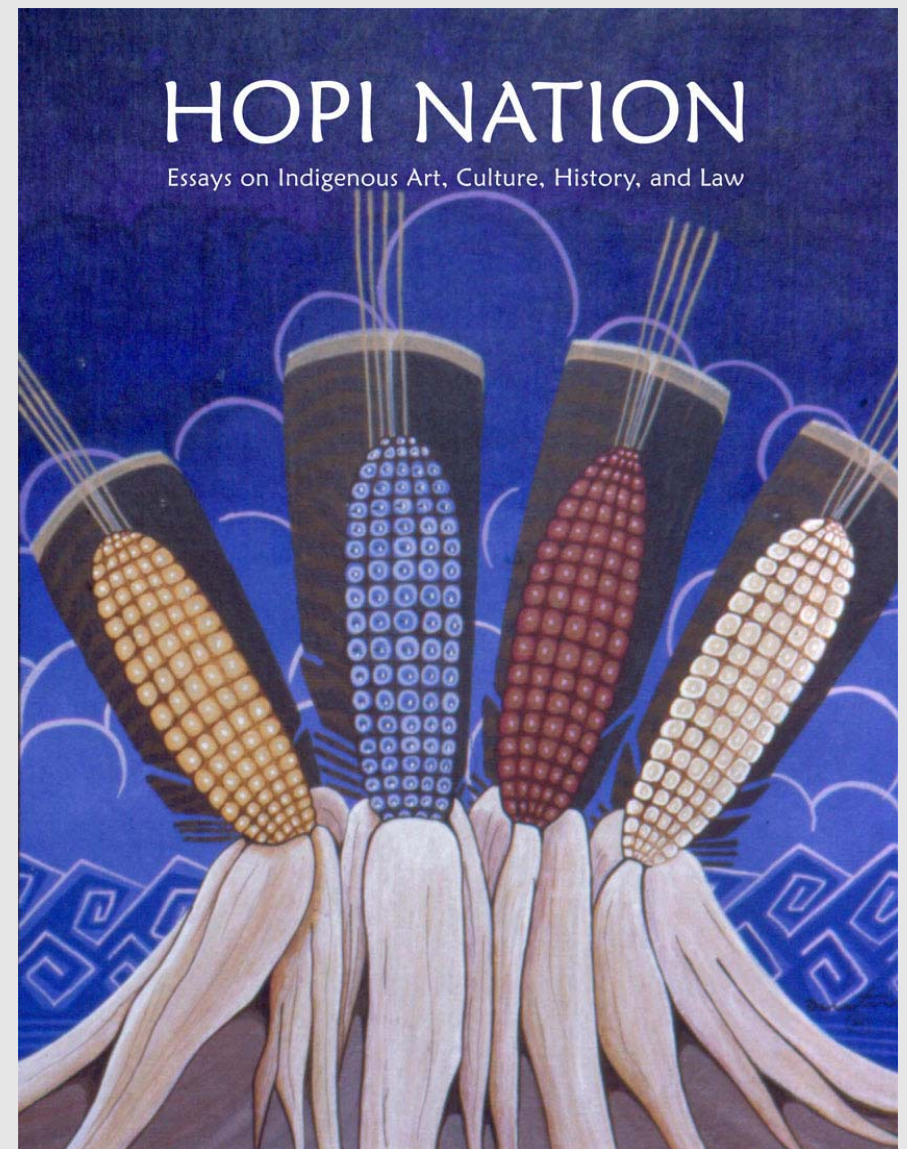
Lulu \$ 2,344; Amazon (Kindle) \$ 1,201



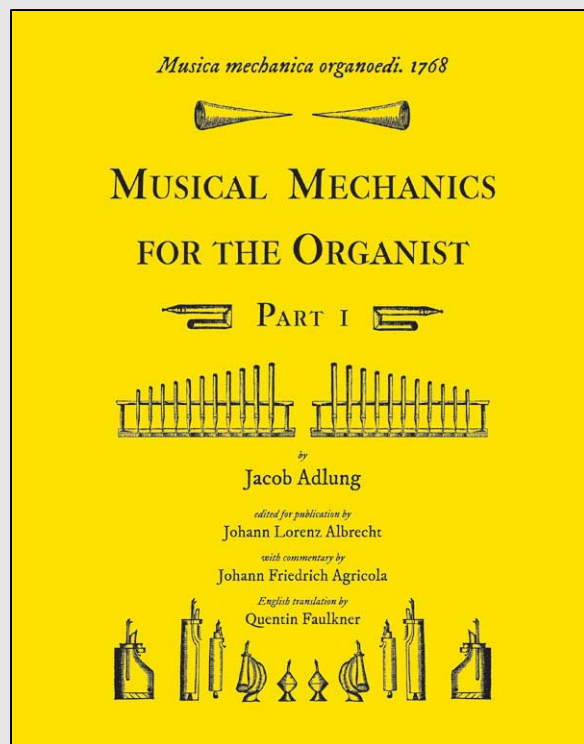
Dictionary of *Invertebrate* Zoology

Mary Ann Basinger Maggenti, Armand R. Maggenti, Scott Lyell Gardner

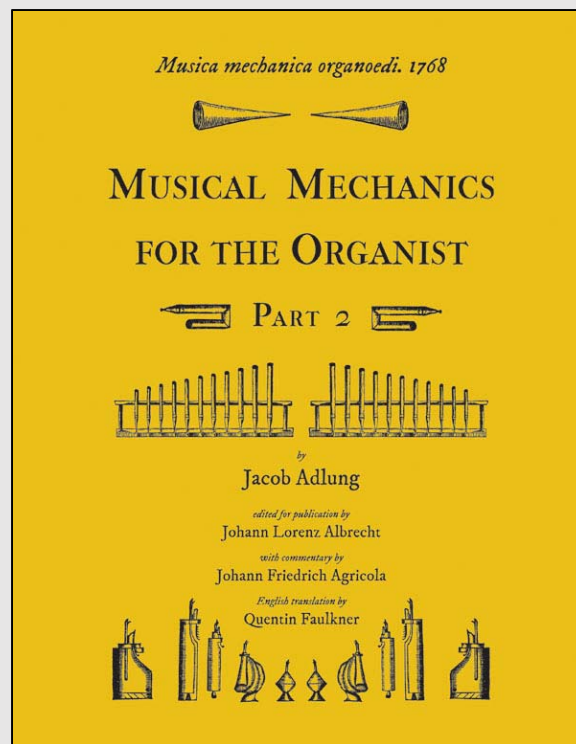
85,165 downloads
(9/05–3/15) avg 25/day



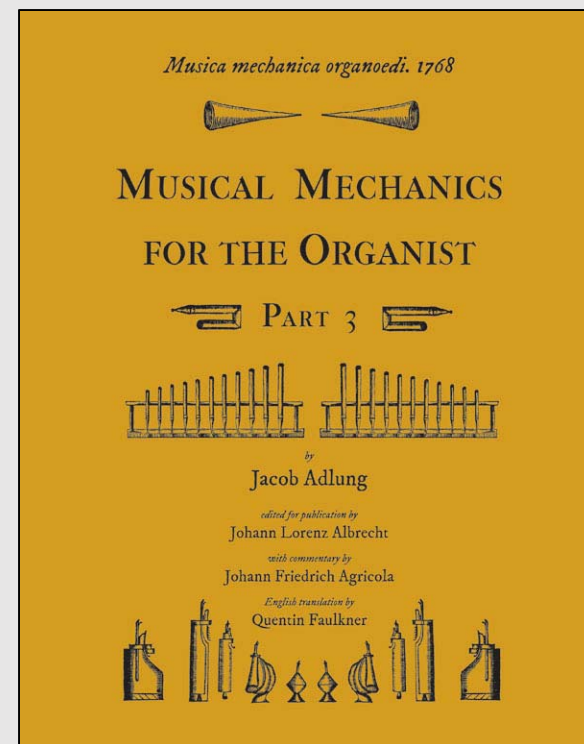
21,649 downloads
(10/08–3/15) avg 9/day



418 pages
8.5" x 11"
\$30 paperback

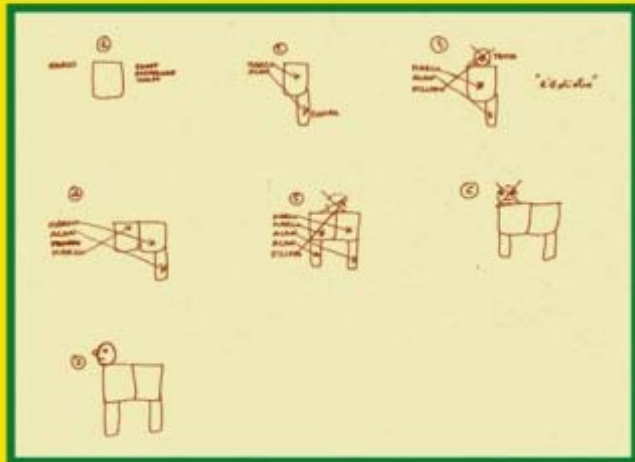


414 pages
8.5" x 11"
\$30 paperback



378 pages
8.5" x 11"
\$30 paperback

*From an emeritus music professor who had spent 20+ years on the translation—
with no real hopes of getting it published.*



Loris Malaguzzi and the Teachers

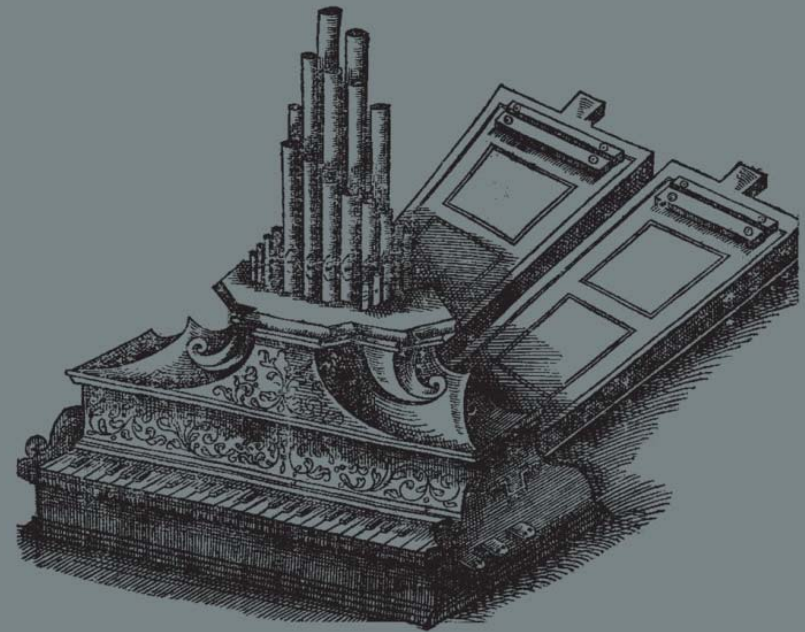
Reflective Practice
in Reggio Emilia 1990

Compiled and Edited by
Carolyn Pope Edwards, Lella Gandini, & John Nimmo

Michael Praetorius SYNTAGMA MUSICUM II De Organographia

Parts III – V, with Index

Translated and edited by Quentin Faulkner



Historical Common Names of Great Plains Plants

Elaine Nowick *N. 332*



Volume I: *Common Names*

504 pages

10 MB pdf

\$35 pb, \$50 hc

Historical Common Names of Great Plains Plants

Elaine Nowick *N. 332*



Volume II: *Scientific Names Index*

472 pages

10 MB pdf

\$35 pb, \$50 hc

Paul A. Johnsgard



Música de las Grullas

Una historia natural de las grullas de América

Global Warming and Population Responses among Great Plains Birds



Paul A. Johnsgard



**Remarkable Russian Women
in Pictures, Prose and Poetry**



Marcelline Hutton

Marcelline Hutton



**Resilient Russian Women
in the 1920s & 1930s**

La grande misère

Great Misery

Maisie Renault

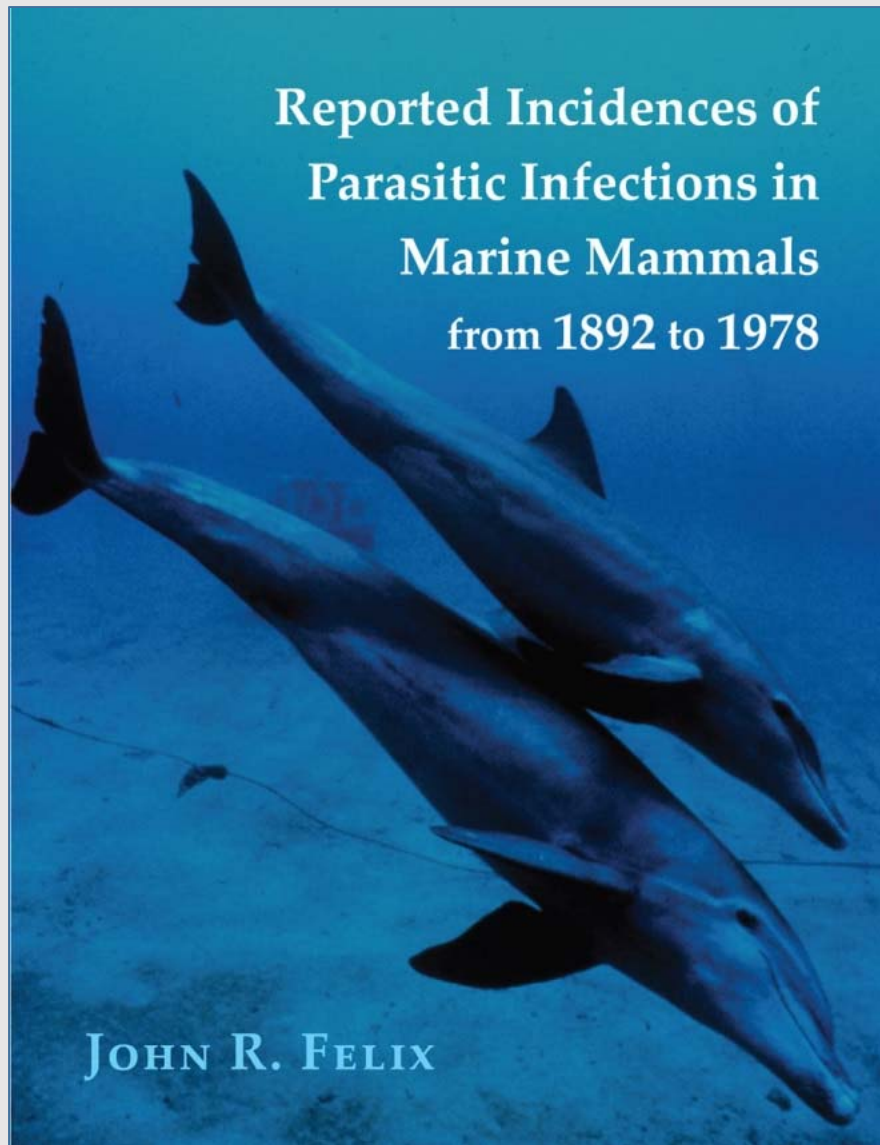
translated by Jeanne Armstrong



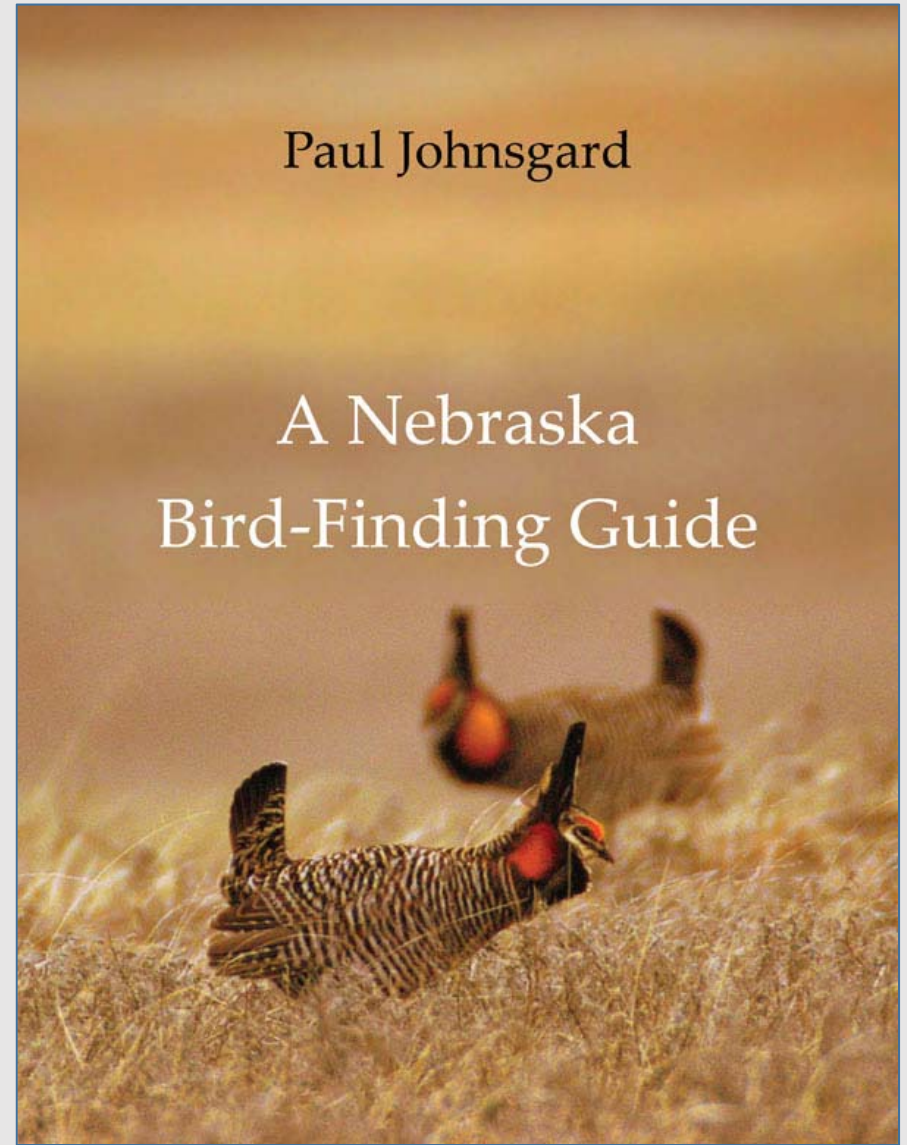
LEON MALMED



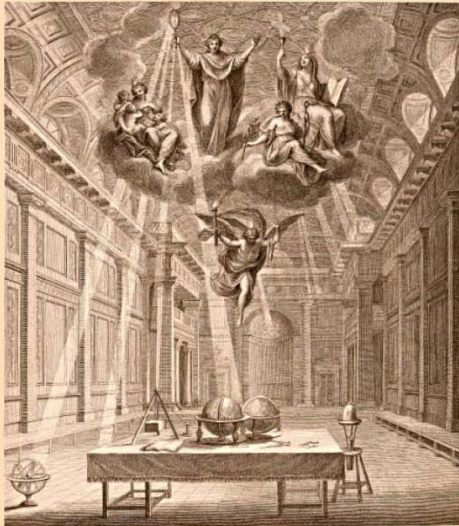
WE SURVIVED
... AT LAST I SPEAK



Q: Where was *schistosomiasis* first reported in sea lions?



Q: Where can I see a prairie chicken lek near Broken Bow?



THE
CONSTITUTIONS
OF THE
FREE-MASONS.

CONTAINING THE
History, Charges, Regulations, &c. of that most
Ancient and Right Worshipful FRATERNITY.
For the Use of the LODGES.

BY JAMES ANDERSON,
as edited and published by Benjamin Franklin, 1734.

71,848 downloads
since February 2006

SINNERS
IN THE HANDS
OF AN
ANGRY
GOD

A Sermon Preached at Enfield, July 8th, 1741

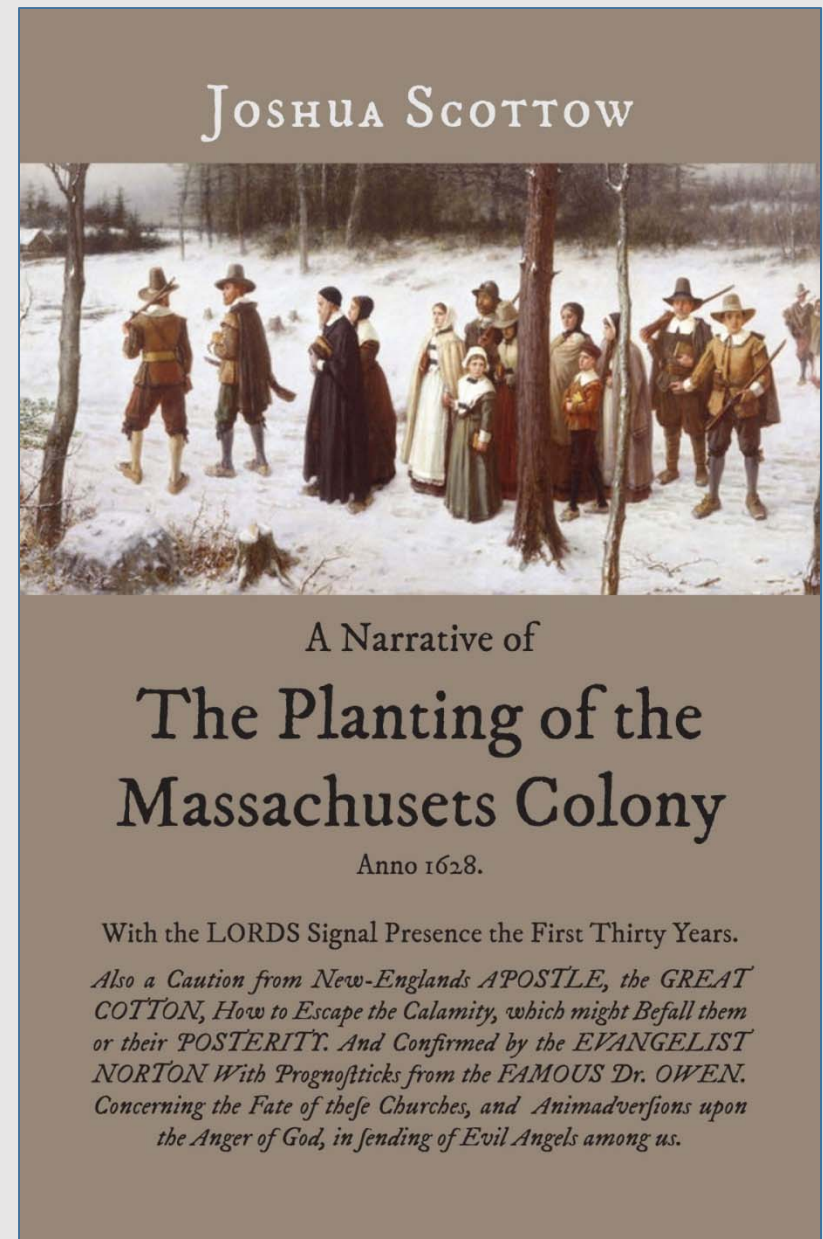
Jonathan Edwards

220,032 downloads
since January 2011



A Brief and True Report of the New Found Land of Virginia

1588



JOSHUA SCOTTOW

A Narrative of The Planting of the Massachusetts Colony

Anno 1628.

With the LORDS Signal Presence the First Thirty Years.

Also a Caution from New-Englands APOSTLE, the GREAT COTTON, How to Escape the Calamity, which might Befall them or their POSTERITY. And Confirmed by the EVANGELIST NORTON With Prognosticks from the FAMOUS Dr. OWEN. Concerning the Fate of these Churches, and Animadversions upon the Anger of God, in sending of Evil Angels among us.

1694

The Negro Christianized



COTTON MATHER

1706

John Cotton



MILK *for* BABES

Drawn out of the Breasts of Both Testaments

1646

Why get involved in publishing “original” content?

- 1) Current state of publishing
- 2) Opportunity for disruptive innovation
- 3) Service relationships with the faculty
- 4) Expanding roles for librarians

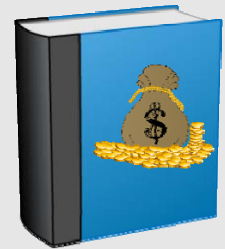


The publishing business model: select → invest → recoup

Select products you think will be popular
(and bet on how popular they will be).



Invest \$15,000 or more to put copies in a
warehouse



Attempt to **recoup** by selling off inventory
to recover capital investment.



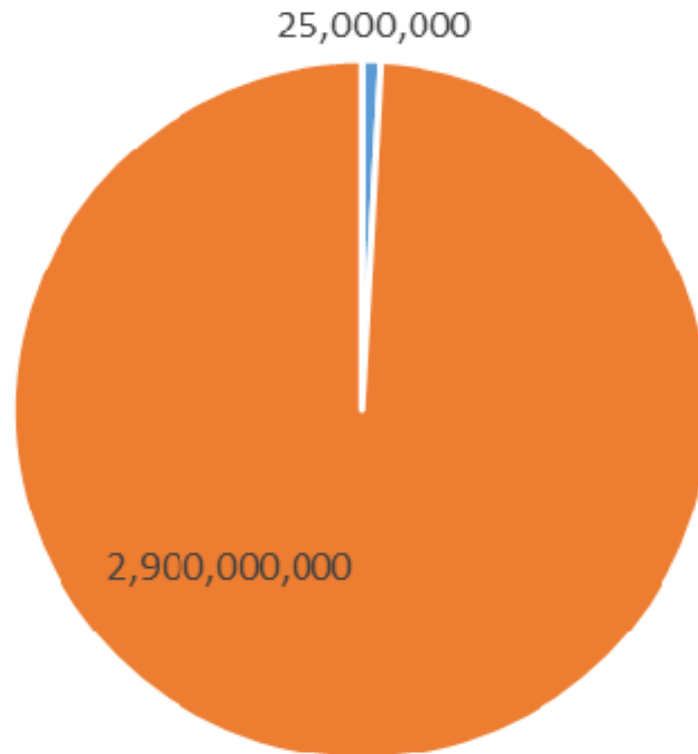
Current publishing is characterized by

- high rates of rejection (> 70%)
- high prices (avg book \$100; avg e-book \$142)
- long schedules (9 – 36 months)
- copyright hoarding
- limited distribution



Potential Readers

Who Are We Reaching?



- US college students & faculty
- Worldwide internet users

If our collection policies
align with products
we already have
the technology to produce ...



... we could stop relying on 3rd-party
profit-taking suppliers.



My “Objective”

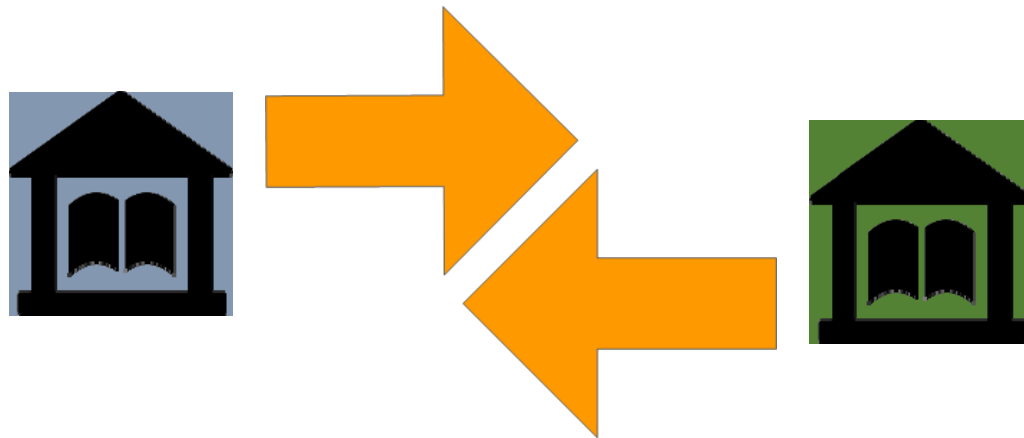


For the colleges and universities to
regain, liberate, or occupy
scholarly communication.



Libraries are the market

If libraries support their own publishing—by collecting and distributing—they will not simply put pressure on the commercial publishers, they will ultimately replace them.



Repositories & Scholarly Communications



Can we leverage a publishing platform into a “disruptive innovation” in the commercial marketplace?

Law repositories have an opportunity—and even a responsibility—to blaze a trail to a new era.



Personal computers have been in common use for 30 years.



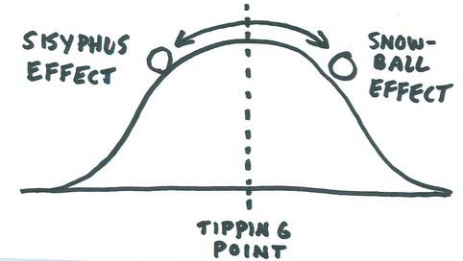
Internet has been widely used for more than 15 years.



But our market and value network is still based on the technology of the printing press.



But now could be the time



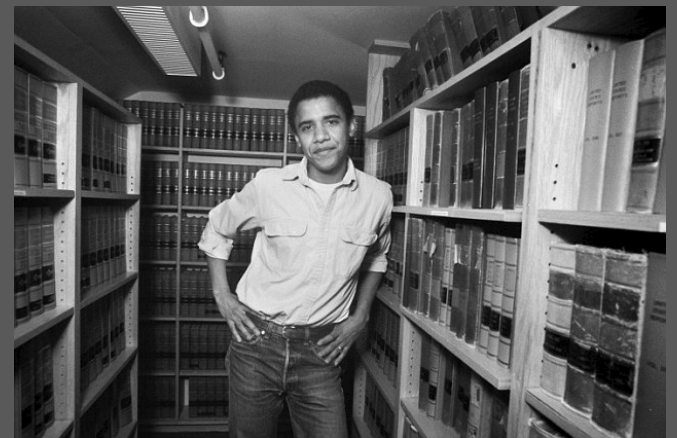
We have an opportunity to tip an unstable market and value network towards ...



a scholarly communications system that favors the universities – instead of exploiting the faculty and bleeding the libraries.

The Law Review Model

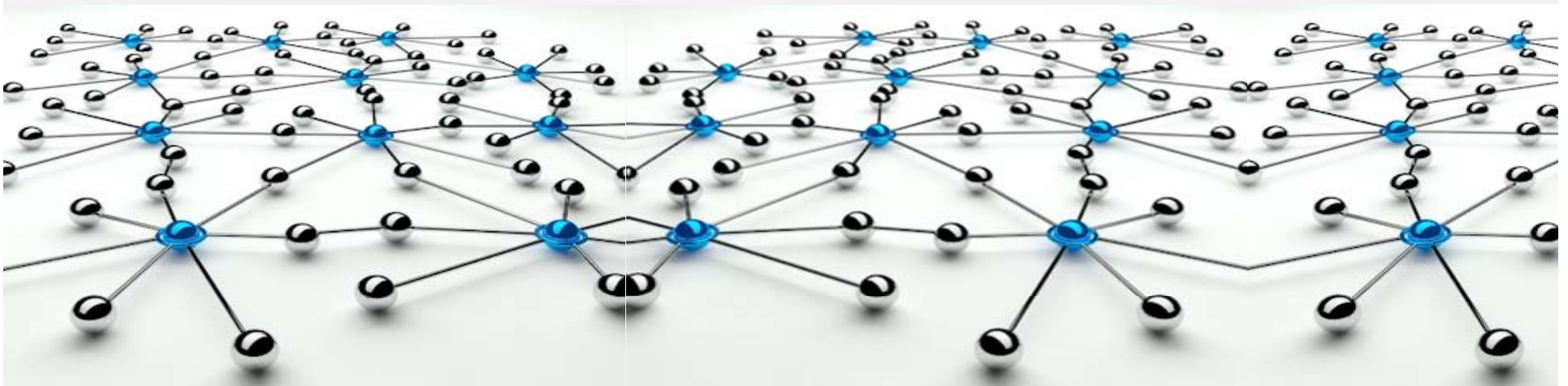
- Published from within the academy.
- Students acquire professional skills and contacts.
- Re-use permissions that are easy and generous.
- Reasonable and stable pricing.



Law review editor, 1988

Important now:

- demonstrate the will to publish
- establish libraries as legitimate players
- support other libraries who publish
- build an aggregator/distributor network outside the existing commercial market



A new day is coming for libraries.

They will become the active enablers, co-producers, and distributors of scholarly content, and the founders of a radically new system of sharing and communication.





“The more people smoke herb,
the more Babylon fall.”
—Bob Marley



The Whore of Babylon “with whom the kings of the earth have committed fornication.” (Rev. 17)

“**Babylon**” represents the powerful things of this world that hold us in bondage and deny us our spiritual growth and intellectual inheritance.

Don't get me wrong ...

- Elsevier is not the Scarlet Whore of Babylon
- Smoking weed will not solve the crisis in scholarly communications



But Moses saw hope
and deliverance in a
burning bush.



... and the Israelites were brave enough to pack
up and leave an oppressive state on an unknown
and uncertain path.

*And they lived
happily ever after.*

(Right?)

Don't tell me ... I haven't finished the book yet, so don't spoil it.

They suffered through many dangers, privations, misdirections, and betrayals.

They were lost for 40 years (but as Daniel Boone said, “If you don’t care where you are, you ain’t lost.”)



The Israelites gathering Manna,
Hendrick de Clerck, 1620s

They came out of Babylon/Egypt because it was the right thing to do.

We need to bring scholarship out of the commercial marketplace because that is the right thing to do—for ourselves, for our students, for our faculty, for our institutions, for the sake of the progress of knowledge.



And if it takes 40 years ...



... it will have been worth it.

Because scholarship will be



Free, widespread, easy to produce, easy to share

And then we can rest.



... or celebrate

The Wedding Dance, Pieter Bruegel the Elder, 1566



THE END

*Thank you
for your patience and indulgence.*

UNIVERSITY OF
Nebraska
Lincoln

email:

proyster@unl.edu



@PaulRoyster

