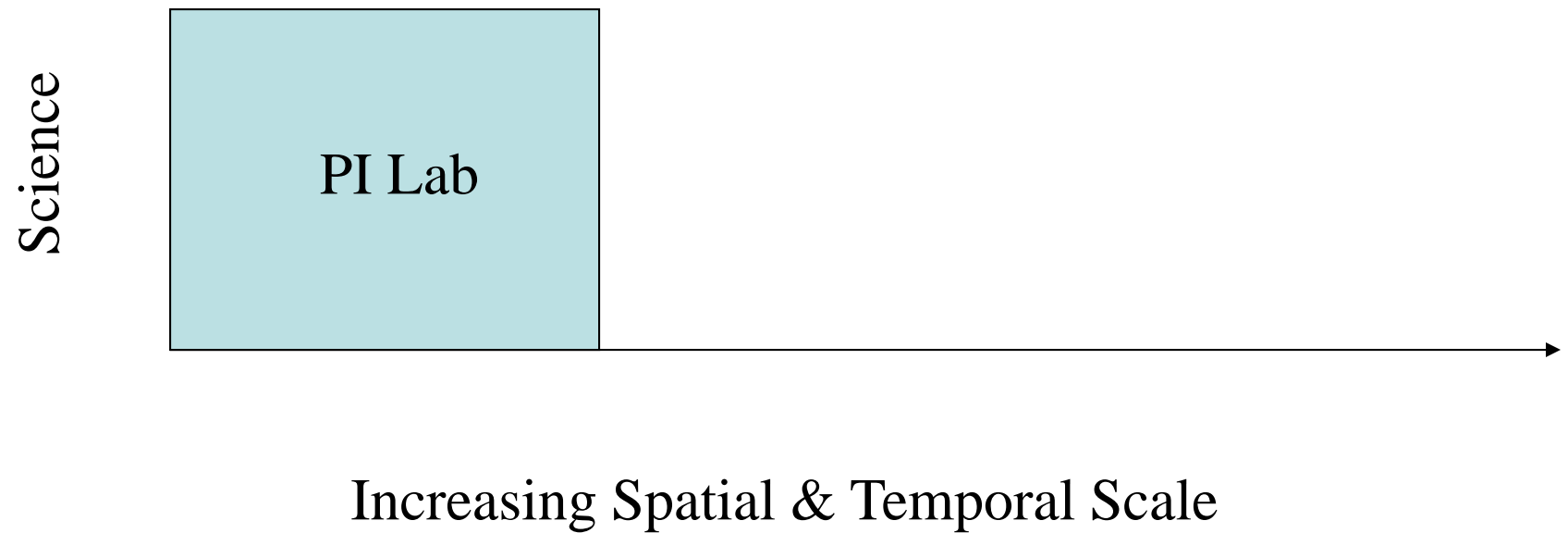




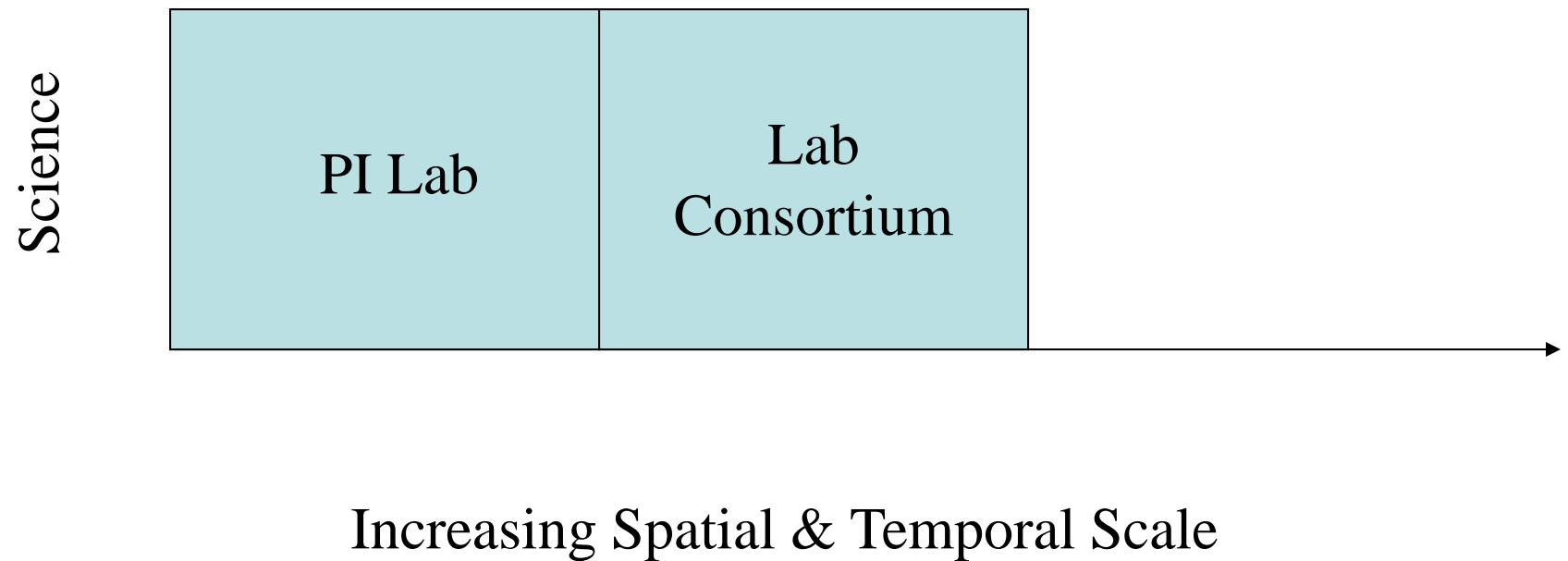
Data Quality in Monitoring: Citizen Science is a New Instrument

Robert D. Stevenson
University of Massachusetts Boston
robert.stevenson@umb.edu

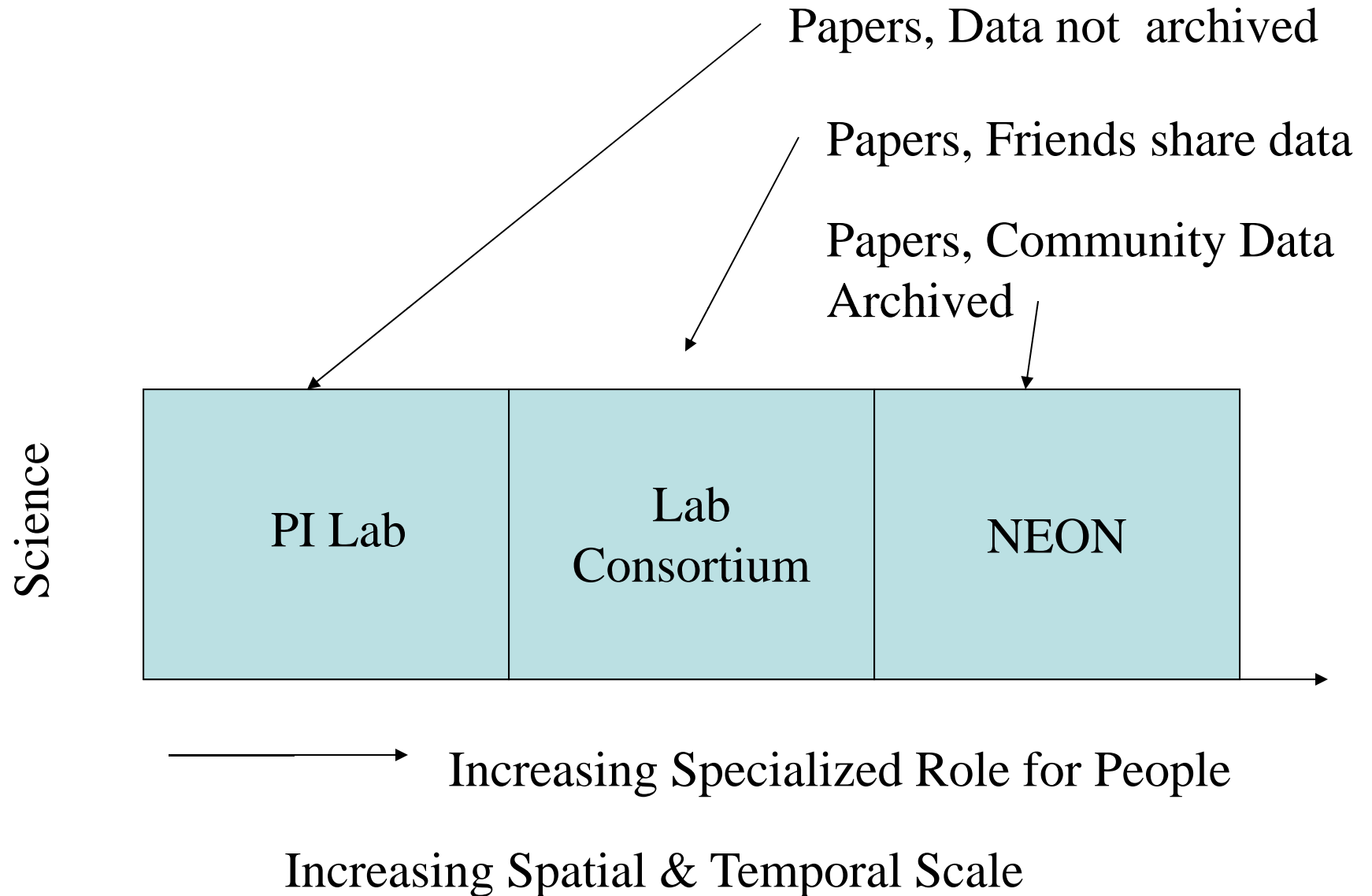
Science Framework



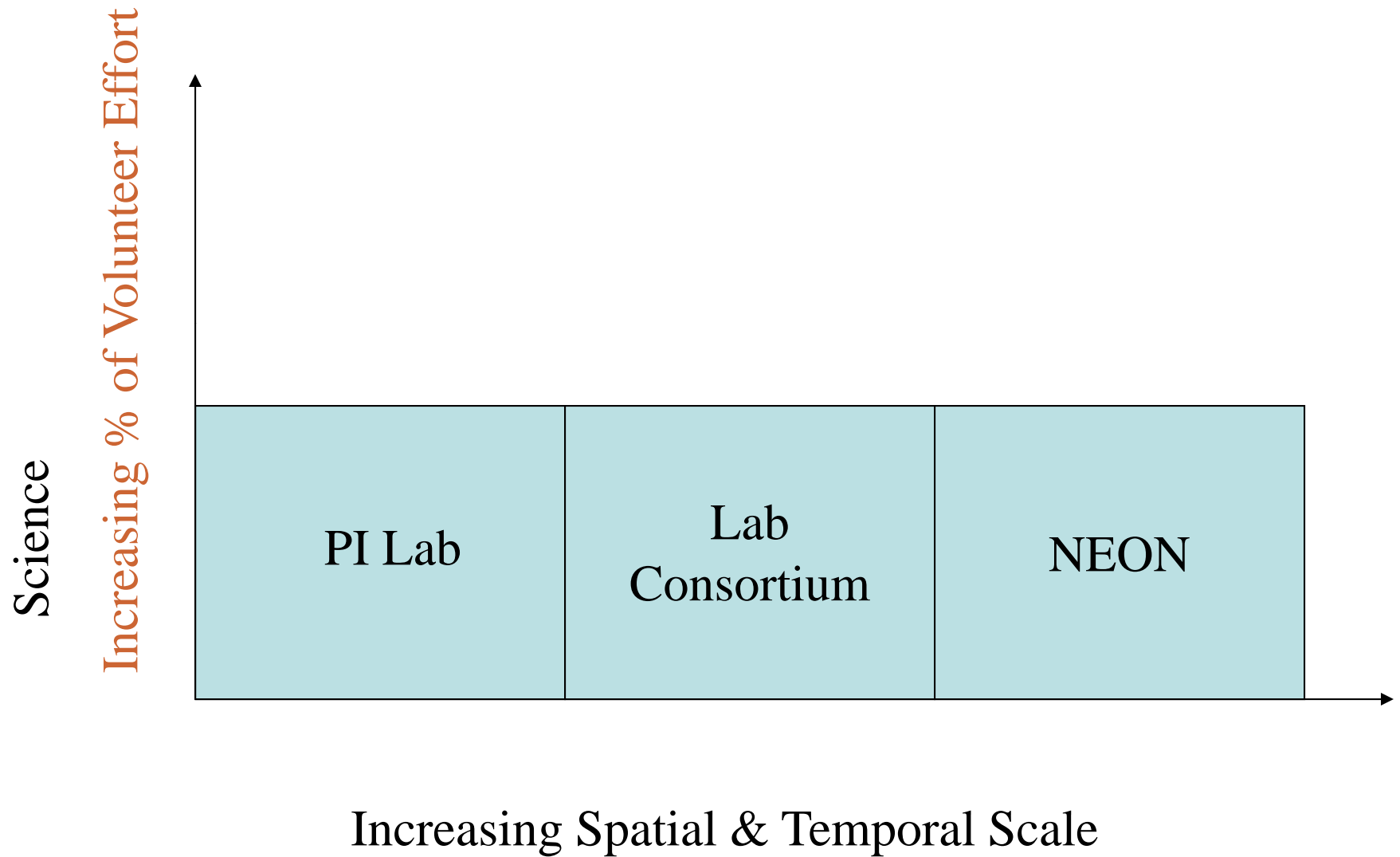
Science Framework



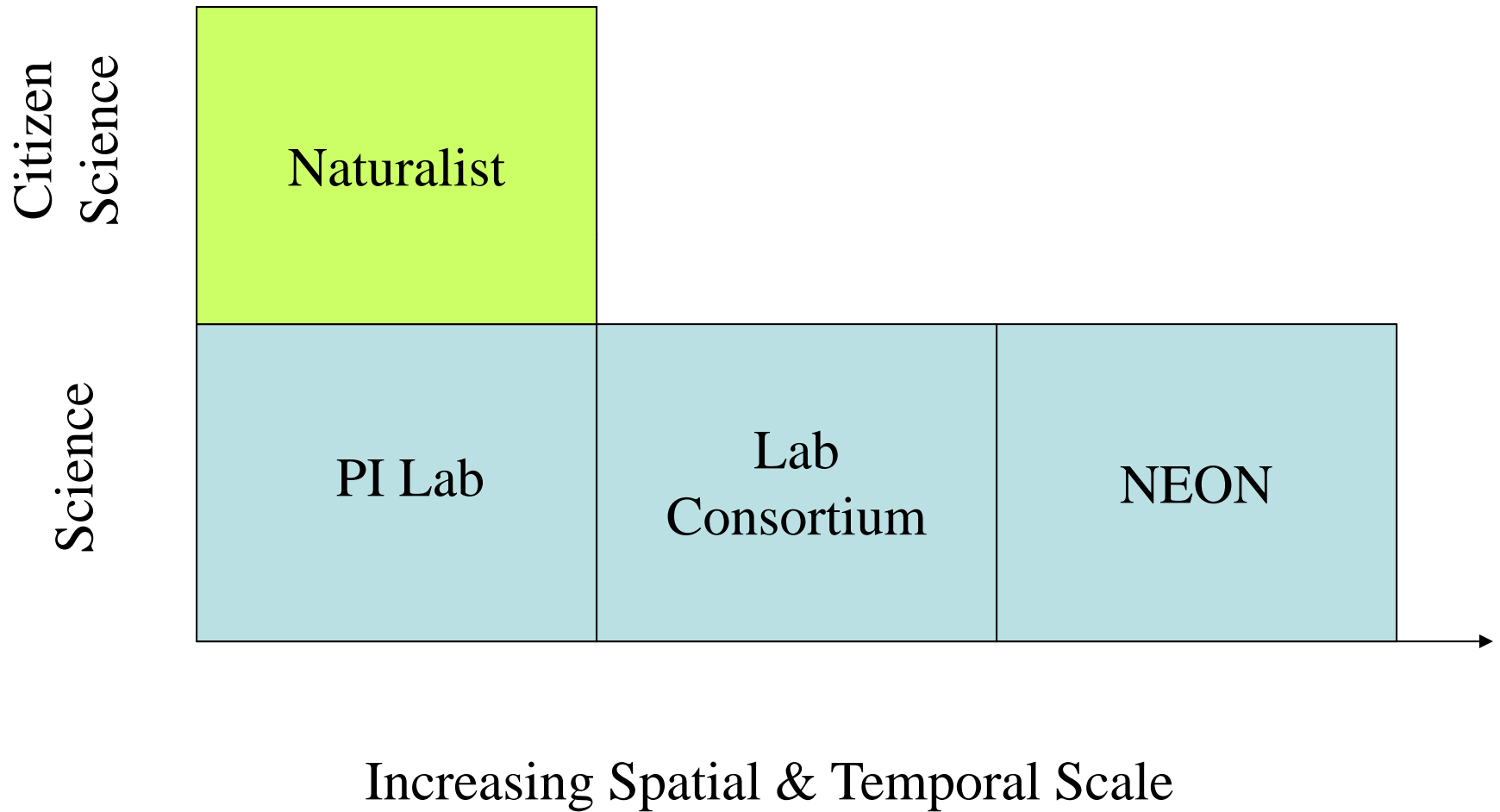
Sharing Information



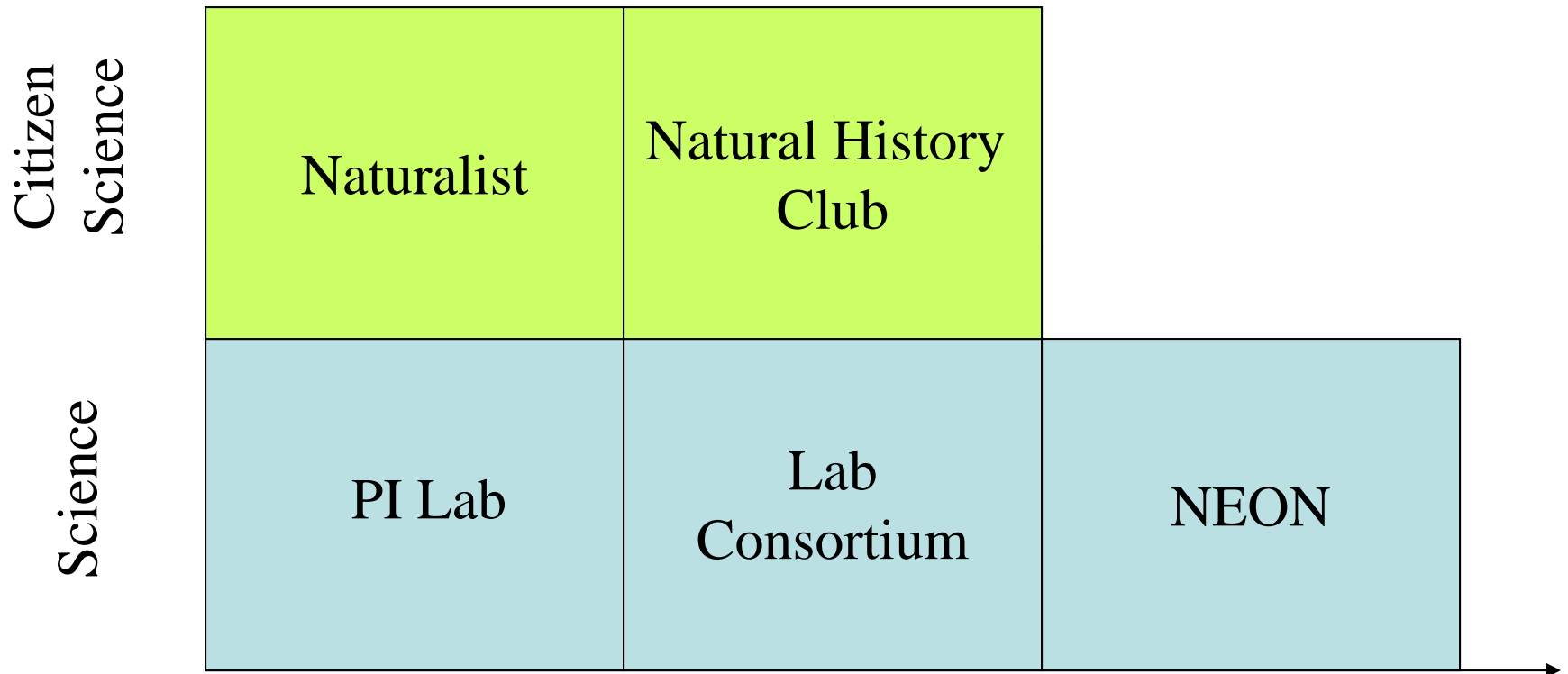
Framework



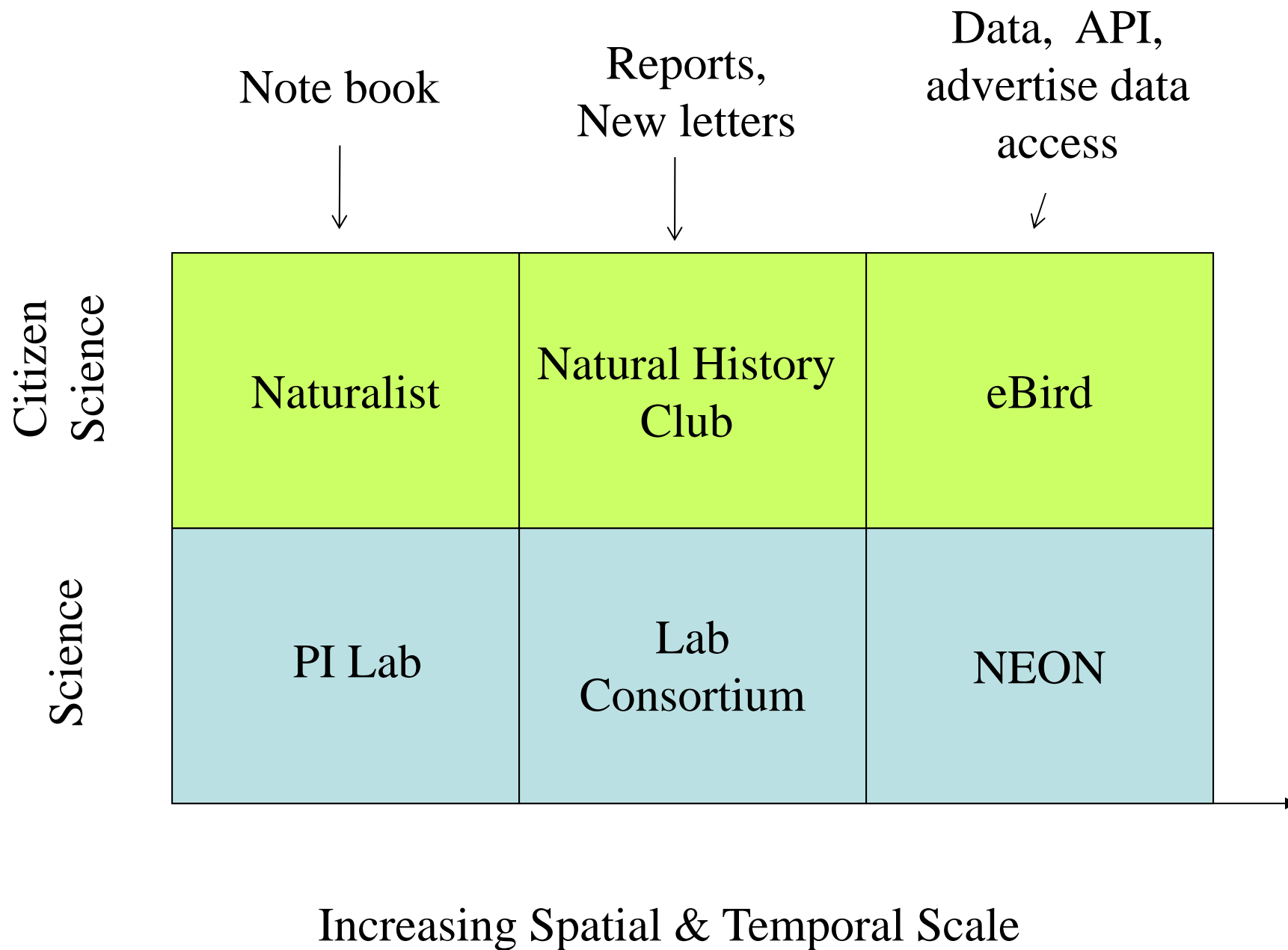
Framework



Framework



Increasing Spatial & Temporal Scale





Citizen Science is not about
papers per say but DATA



Citizen Science is about a
NEW KIND of
INSTRUMENT

Send email

To: **Paula & Tim Reynolds** <reynoldsfamily@ns.sympatico.ca>
From: David Bonter <dnb23@cornell.edu>
CC: David Bonter <dnb23@cornell.edu>

Subject:

Question about your Dickcissel observation in Project FeederWatch

Message:

Dear Paula & Tim Reynolds,

I am one of the regional reviewers for Project FeederWatch and am writing to you about your observation of 1 Dickcissel on Jan 19, 2008.

When you submit a checklist to Project FeederWatch, we use automated filters that compare your observations with typical totals for that month and region. If a count on your checklist exceeds the expected daily total for a species, then you will be asked to confirm the entry. Examples of flagged records are early or late arriving migrants, or counts of species that are exceptionally high. Rare birds and high counts do occur (we love seeing them as much as you do!), but in order to maintain high data quality standards we ask for further details before these observations can be accepted into the database.

We are asking for additional details on the following observation:

Species: Dickcissel
Count: 1
Observation date: Jan 19, 2008
Location: lilingo, null, CA-NS
Submission ID: S3815040

Send Email

Cancel

Review Observations

Select and change... Validity:

<input type="checkbox"/>	Submission	Species - Alpha
<input type="checkbox"/>	S3482762	White-crowned
<input type="checkbox"/>	S3725261	White-crowned
<input type="checkbox"/>	S3725171	White-crowned
<input type="checkbox"/>	S3465610	White-crowned
<input type="checkbox"/>	S3725219	White-crowned
<input type="checkbox"/>	S3617557	White-crowned
<input type="checkbox"/>	S3435663	White-crowned
<input type="checkbox"/>	S3647926	Black-headed Gr
<input type="checkbox"/>	S3815049	Dickcissel
<input type="checkbox"/>	S3279435	Brewer's Blackbi
<input type="checkbox"/>	S3409892	Brewer's Blackbi
<input type="checkbox"/>	S3316070	Brewer's Blackbird
<input type="checkbox"/>	S3340561	Brewer's Blackbird

1 Dec 1, 2007

[Gordon Brown](#)

[141 Pleasant Valley Road](#)

ON (CA)

1 Dec 15, 2007

[Gordon Brown](#)

[141 Pleasant Valley Road](#)

ON (CA)

Flagged Reports Step 3:


Review evidence, confirm or reject

Confirmed:

- Report and photo posted on website

Home:
U.S.
Canada





Project FeederWatch



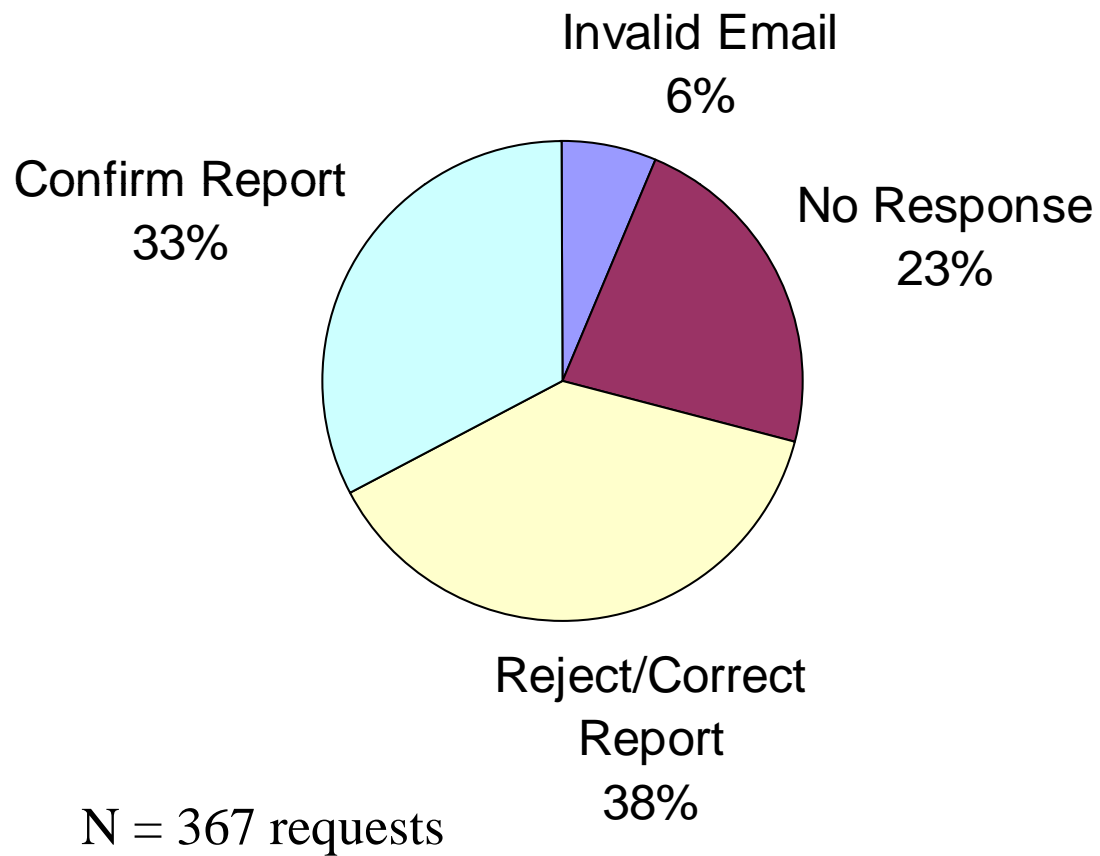
[About FeederWatch](#) [Instructions](#) [Data Entry](#) [Explore Data](#) [News](#) [About Birds & Bird Feeding](#)

2007-2008 Rare Bird Reports

Confirmed reports through July 1, 2008

Bird Species	Location	Photo (click to enlarge)	Observer	Comments
Ross's Goose	National City, MI		L. Joseph	A rare, but regular, migrant through the area.
Dovekie	Newton, MA		A. Simunovic	A pelagic species found in the north Atlantic, blown to shore during a strong storm. Certainly a first for FeederWatch!
White-winged Dove	Manitowadge, ON		T. Hache	A mostly tropical dove, typically found in the Southwest, though it is increasing its range northward.
Red-masked Conure	Daly City, CA		M. Yee	Also known as Cherry-headed Conure, this is the species featured in the movie "The Wild Parrots of Telegraph Hill." Introduced from Ecuador and Peru.

Reviewed Records 2007-08



Streak-backed Oriole,
Loveland, Colorado

Lingering issues

- Misidentifications that do not trigger the flagging system
- Outdated contact information
- Paper data delay



eBird — Growth in Observations



eBird 2.0 launches

Engage Birders through Training





Mechanisms for Data Quality and Validation in Citizen Science

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[‡]Department of Biology

University of Massachusetts at Boston, Boston, MA USA

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Modeling Experts and Novices in Citizen Science Data for Species Distribution Modeling

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Corvallis, OR 97331

October 11, 2010



Data Quality

- 1) Quality Assurance Project Plans
- 2) Initial and continued Training of Observers
- 3) Rating Observers
- 4) Experience in participation
- 5) Review by more experienced observers
- 6) Electronic Filtering based on previous data collected
- 7) Recheck with Observer
- 8) Digital Voucher

Know the Human Observation Sensor!



From a stroll in the Park to
Reviewed Shared Record