RESULTS OF A SURVEY FOR FIELD ARCHAEOLOGISTS / CULTURAL RESOURCE MANAGERS

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Abstract

Around the campfire, at the pub, or online, many of us discuss problems that we have seen, heard, or experienced in the field while working to conserve cultural resources. These are almost always allegorical or through the "grapevine". This survey is an attempt to provide actual numbers and data to back up arguments when discussing these issues in addition to trying to change issues in the field. Hopefully this report will lead to a call for more in depth research in the future.

Introduction:

After a decade of working in the field of cultural resource archaeology, I have learned many things; one of which is that my colleagues are almost always willing and ready to relax after a hard day of work out at the grill, campfire, pub, or just the back patio of the hotel. Both on the job, and online, talk often turns to issues in the field. It can range from issues from the day's labors, all the way to larger overall issues that impact the profession as a whole. While we often talk about these issues, they are almost always allegorical with few facts or data to back up arguments that could be used to change the profession. This survey is an attempt to get some rudimentary data about many of the things that I have seen and heard discussed ranging from wages and experience to discrimination to sexual harassment, education, regional differences, as well as a number of other points.

This survey was conducted from May through September 2015, and was posted on multiple Facebook groups, individual Facebook pages, an Archaeologyfieldwork.com discussion board, and through networking. There were 479 responses overall. I produced this survey independently – it is not affiliated with any school, organization, company, or governmental organization – it is research for the sake of research and I had no budget for it besides my own time which was volunteered.

While this covers a wide range of questions and has a fairly small sample size, it is an attempt to turn the lens that we use to examine other cultures and peoples back on ourselves and do some self-reflection and examination.

I realize that while this survey may have a very small sample size, and results could vary drastically should it be run again with the assistance of national organizations, it has the potential to show trends in our profession. In order to estimate sample size, I attempted to find out how many archaeologists / cultural resource managers there are in the US (while I realize that all of the places that I distributed the survey to hold the potential to collect data from people outside the US, I will use US data

as a starting point). After reading what little there is out there about the data, I decided to use the numbers provided by Doug Rocks-MacQueen ([2014](#)) as they seem the most realistic and well researched. In his 2014 post How Many Archaeologists are in the US?: More than a couple, less than there should be he estimates that a grand total around 11,000. Although as he states, these numbers are based on arbitrary definitions and I will re-emphasize the desperate need for a census of archaeologists so that we can better understand our own profession.

While we spend much of our time, energy and passion examining other cultures, traditions and peoples, we should take some time to come together as anthropologists and archaeologists and use those same methods of study on ourselves. All that being said, with a very rough estimate of 11,000 archaeologists and perhaps bumping that up to 15,000 adding in many who work in the profession who may not fit these arbitrary titles, the sample size is under 5%. Hopefully this helps to inspire larger, stronger organizations such as the SAA to work at creating a call to research this in a larger, more in depth fashion.

Results:

I will present the question I posed, followed by the results, then a brief summary if I feel it is needed. I also used the data to try to answer a series of additional questions that could be gleaned from the existing data – these will follow the 23 original questions.

Gender

What Gender do you identify with?
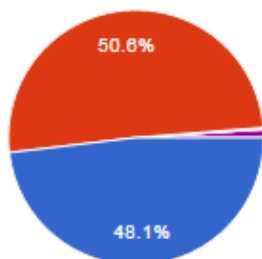
Male	**229**	48.1%
Female	**241**	50.6%
Transgender	**1**	0.2%
Other	**0**	0%
Choose not to answer	**5**	1.1%

The mix here was a pretty even split, which is promising.

Age

While there are certainly a large number of people under 40 in this field, the areas it was distributed and perhaps the technology gap that goes along with a generational gap may be something that impacted these numbers, and the number of the responses overall. Then again, for as hard as this field can potentially be on our bodies, there may indeed be a trend where after 20 years, it is simply enough and people choose to do something else. I'm still not sure what to make of this, and as someone looking at 40, I'm somewhat curious what this implies to my future employment prospects. This may be due to the demographics of those who use the sites I posted this survey at. It may also be due to the physicality of the job, and by the 40s many an archaeologist doesn't hop out of bed as easily as someone in their 20's or 30's does. Other causes could be non-work desires such as health insurance, retirement planning, family, and

How old are you?
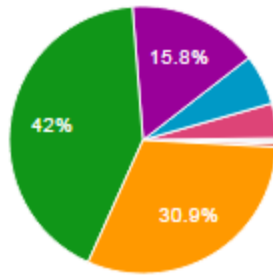
<18	2	0.4%
19-20	2	0.4%
20s	147	30.9%
30s	200	42%
40s	75	15.8%
50s	29	6.1%
60s	20	4.2%
70s	1	0.2%
80+	0	0%

many of the things that people want out of a modern life that archaeology does not always provide an option for.

Experience

How many years of experience do you have performing work in the field of cultural resources / archaeology?
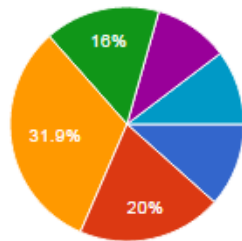
0 - 2 years	55	11.6%
2 - 5 years	95	20%
5 - 10 years	152	31.9%
10 - 15 years	76	16%
15 - 20 years	49	10.3%
20+ years of working with cultural resources	49	10.3%

Again, this may have more to do with the demographics of the survey rather than overall trends, but it again shows a drop-off of people after about 15 years in the field. It shows the importance that others have started of learning other skills and not to put all of your future eggs into the cultural resources basket as you will likely not be able to properly invest in things like retirement, savings etc. and as you get closer to retirement you may choose to pursue other careers that provide the opportunity to make those investments and obtain the security that otherwise is lacking.

Hourly Wages

What is/was the latest hourly wage that you were paid for performing cultural resources / archaeological work in the field
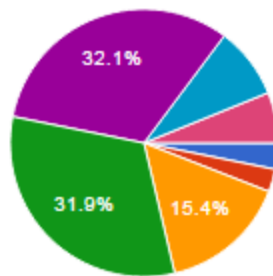
< $10.00 per hour	15	3.2%
$10.00 - $12.00 per hour	13	2.7%
$12.01 - $14.99 per hour	73	15.4%
$15.00 - $18.00 per hour	151	31.9%
$18.00 - $24.00 per hour	152	32.1%
$25.00 - $30.00 per hour	41	8.6%
> $30.00 per hour	29	6.1%

From many of the postings I have seen, and from many of the folks I have talked to, finances seem to be a huge sticking point - I know we all seem to feel the pinch of an empty wallet, but this seems to show that there is a trend towards what is considered decent pay – but of course just because this survey shows some decent pay it does not mean that this results in higher actual annual income.

Months out of the Year

How many months out of the year do you regularly work doing archaeology / CR related work?
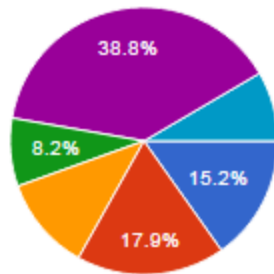
Less than 6 months	72	15.2%
6 - 8 months	85	17.9%
9-10 months	54	11.4%
10-11 months	39	8.2%
Year round at the same firm	184	38.8%
Year round, though I bounce from project to project	40	8.4%

Yet again, here is a chart that might dispel some of the ideas of our field – almost 40% of us work year-round at the same firm, but still shows that over half of participants do not work the entire year in archaeology.

Other Income

When you are not working in the field of CRM / Archaeology, what do you do for income?

I rely on unemployment insurance.	97	20.6%
I work in retail establishments.	34	7.2%
I work in a restaurant / food industry.	27	5.7%
I work as a substitute teacher.	9	1.9%
I work as a regular teacher.	5	1.1%
I work with temp agencies.	16	3.4%
I freelance doing whatever I can to get by.	109	23.1%
I rely on savings, investments, and other financial planning.	133	28.2%
I have the support of family, friends or other people	90	19.1%
NOT APPLICABLE - I am employed year round	167	35.5%
Other	67	14.2%

This graph essentially shows that while again, over 35% work year round, among those who don't, there is a fair number who have what may be an awful lot of down time. As others have mentioned in many other posts, books etc., use that time wisely and try to get some experience that can lead to other opportunities.

Annual Adjusted Gross Income

What would you say your average annual adjusted gross income is?
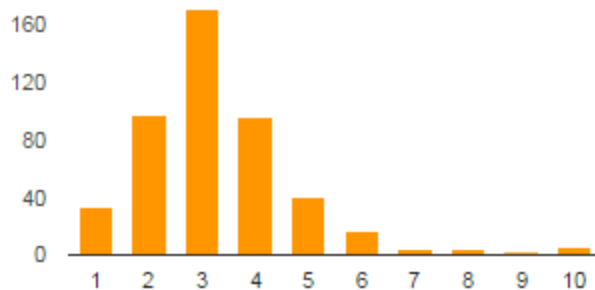
<$10,000: 1	34	7.2%
2	98	20.8%
3	171	36.3%
4	96	20.4%
5	40	8.5%
6	16	3.4%
7	4	0.8%
8	4	0.8%
9	2	0.4%
>$90,000: 10	6	1.3%

In this chart, each number represents a $10,000 interval, so 2=$10,000-$20,000 etc. Even though ~40% of participants are employed full time, and over 90% of participants have at least a bachelor's or master's degree (see next question), almost 84% of participants make less than $40,000 per year, with 64% of participants making less than $30,000 per year. Compare this to

the graph that the Bureau of Labor Statistics has for comparing archaeologists/anthropologists as well as all social sciences:

Anthropologists and Archeologists
Median annual wages, May 2014

Social scientists and related workers — $71,030

Anthropologists and archeologists — $59,280

Total, all occupations — $35,540

Note: All Occupations includes all occupations in the U.S. Economy.
Source: U.S. Bureau of Labor Statistics, Occupational Employment Statistics
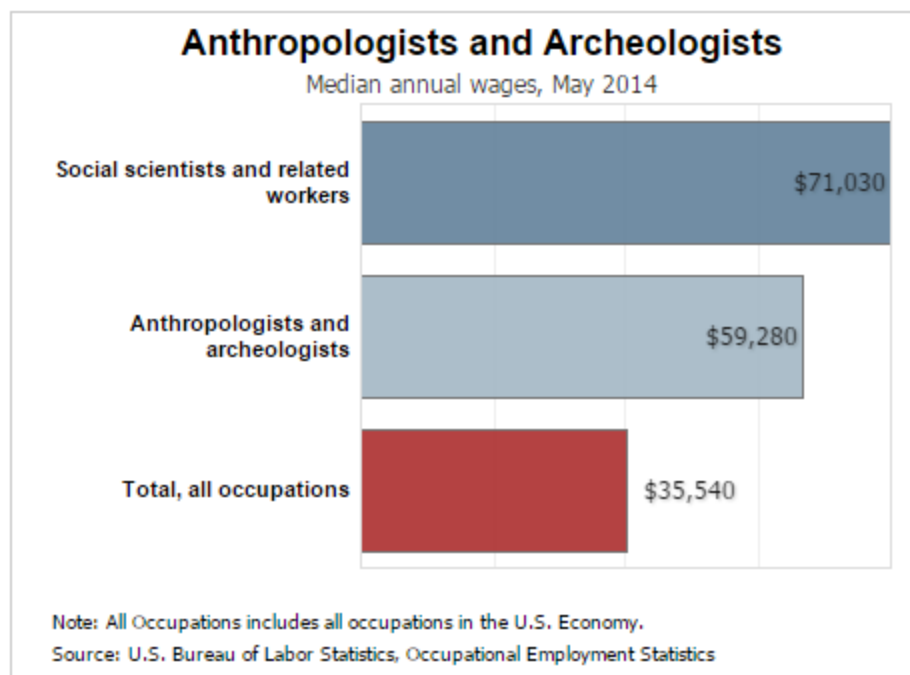
Here we have proof of what we hear so often – that our median income is well below what it appears to be – and that it is FAR below what other social science professions show.
I have lost count of the number of times when I have heard stories about how we are the lowest paid people on many projects. Without some sort of organization to represent us to the world at large, and to push back for our profession to clients and government agencies, we will continue to be the low men on the ladder when it comes to pay. Increasing overall bids across the profession instead of constantly lowballing should be a priority that ACRA, RPA and SAA should address in some form or another. After all, continued lowballing and price wars in CRM only harm the resources by not allowing companies to do the best service to the resource that we are giving our time, talents, blood and sweat to conserve. I think we are all worth more than that, and the resources are worth more than that. Some will argue that it is difficult or impossible to draw a correlation between quality or work, or care for the resource and pay, but people perform better work when they feel appreciated – and that appreciation is very often reflected in pay. They perform better when they can focus on the resource, and their job, instead of worrying about how they are going to pay their bills, feed their family and get to the next project.

Education

What best describes your level of education?
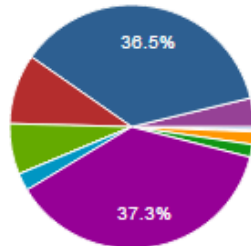
Have not finished High School or taken GED	2	0.4%
High School Diploma / GED	1	0.2%
Associates / 2 year Degree	8	1.7%
Some college courses, but have not graduated	8	1.7%
Bachelors / 4 year degree in archaeology, anthropology, history, social science or other related field	177	37.3%
Bachelors / 4 year degree in a different major	11	2.3%
Military experience and training	0	0%
Some graduate level coursework	32	6.8%
All graduate level coursework completed but have not yet completed thesis / culminating project	44	9.3%
Graduate / Master's Degree	173	36.5%
Ph. D. / Doctorate Degree	18	3.8%

This should come to no surprise to most, but the participants are a very well educated group – over 90% of participants hold a degree relating to the field. Compared to the general population of the US, where the statistics show that only 40% of working age people hold a degree of any sort.

Again, comparing this with a chart from the BLS showing income compared to education for the population:

Earnings and unemployment rates by educational attainment

Unemployment rate in 2014 (%) | | **Median weekly earnings in 2014 ($)**

2.1	Doctoral degree	1,591
1.9	Professional degree	1,639
2.8	Master's degree	1,326
3.5	Bachelor's degree	1,101
4.5	Associate's degree	792
6.0	Some college, no degree	741
6.0	High school diploma	668
9.0	Less than a high school diploma	488

All workers: 5% | | All workers: $839

Note: Data are for persons age 25 and over. Earnings are for full-time wage and salary workers.
Source: Current Population Survey, U.S. Bureau of Labor Statistics, U.S. Department of Labor

If you take that $1101 that someone with a bachelor's degree earns, the median in weekly earnings, x 52 weeks it comes out to over $57,000. That is probably close to double what the median would be for what participants with a bachelor's degree reported in this survey (Education to Wages). The same can be said for those with a master's degree and even a doctoral degree. In essence what this survey has found is that according BLS data we are as a whole getting underpaid for our level of education.

Positions

What is the highest position you have held?
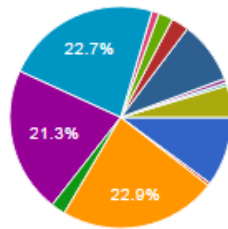
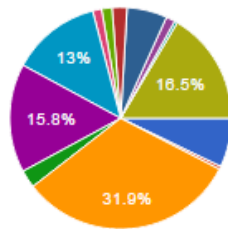| Position	Count	Percent
Project Manager (~GS-11)	48	10.1%
Intern	2	0.4%
Archaeological Field Technician (~GS-5)	109	22.9%
GIS / GPS Technician	10	2.1%
Crew chief (~GS-7)	101	21.3%
Field Director (~GS-9)	108	22.7%
Volunteer	5	1.1%
Lab Technician	10	2.1%
Lab Manager	12	2.5%
Principal Investigator	43	9.1%
Management Office Staff	3	0.6%
Office support staff	2	0.4%
Other	22	4.6%

What is your current position?

Position	Count	Percent
Project Manager (~GS-11)	33	7.2%
Intern	2	0.4%
Archaeological Field Technician (~GS-5)	147	31.9%
GIS / GPS Technician	12	2.6%
Crew chief (~GS-7)	73	15.8%
Field Director (~GS-9)	60	13%
Volunteer	6	1.3%
Lab Technician	7	1.5%
Lab Manager	10	2.2%
Principal Investigator	27	5.9%
Management Office Staff	6	1.3%
Office support staff	2	0.4%
Other	76	16.5%

These two charts show the distribution of participant's positions and responsibilities in the field. Of the various positions out there, the majority are field based and often those are not 'secure' in the traditional sense of being able to have a reliable job that they are year round and permanent. Only 45% of participants have ever held a position in what I would call management, being Project Managers, Lab Managers, Principal Investigators, Management office staff and Field Directors. Even the position of Field Director could be a so-so position when it comes to management, as I think it would most likely fall into middle management and is still by no means a secure position, though these could account for the 35-38% of participants who are employed year-round and the 36% of participants making over $30,000 per year.

Regionality

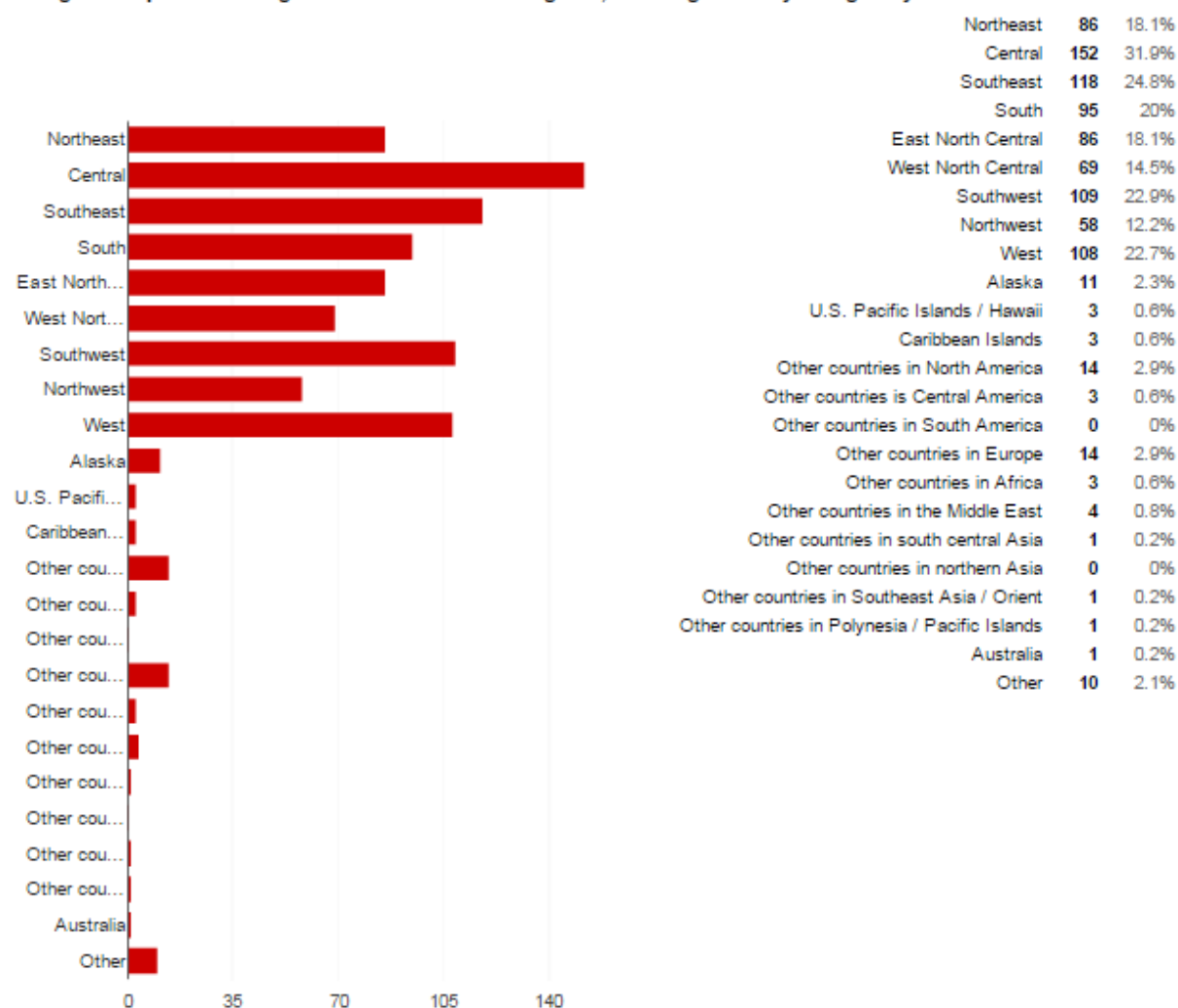THE NINE REGIONS AS DEFINED BY THE NATIONAL CLIMATIC DATA CENTER (NCDC) AND REGULARLY USED IN CLIMATE SUMMARIES

NORTHWEST

WEST NORTH CENTRAL

EAST NORTH CENTRAL

NORTHEAST

WEST

CENTRAL

SOUTHWEST

SOUTHEAST

SOUTH

CLIMATE PREDICTION CENTER, NOAA

Using the map above as a guide to continental US regions, what regions do you regularly work in?

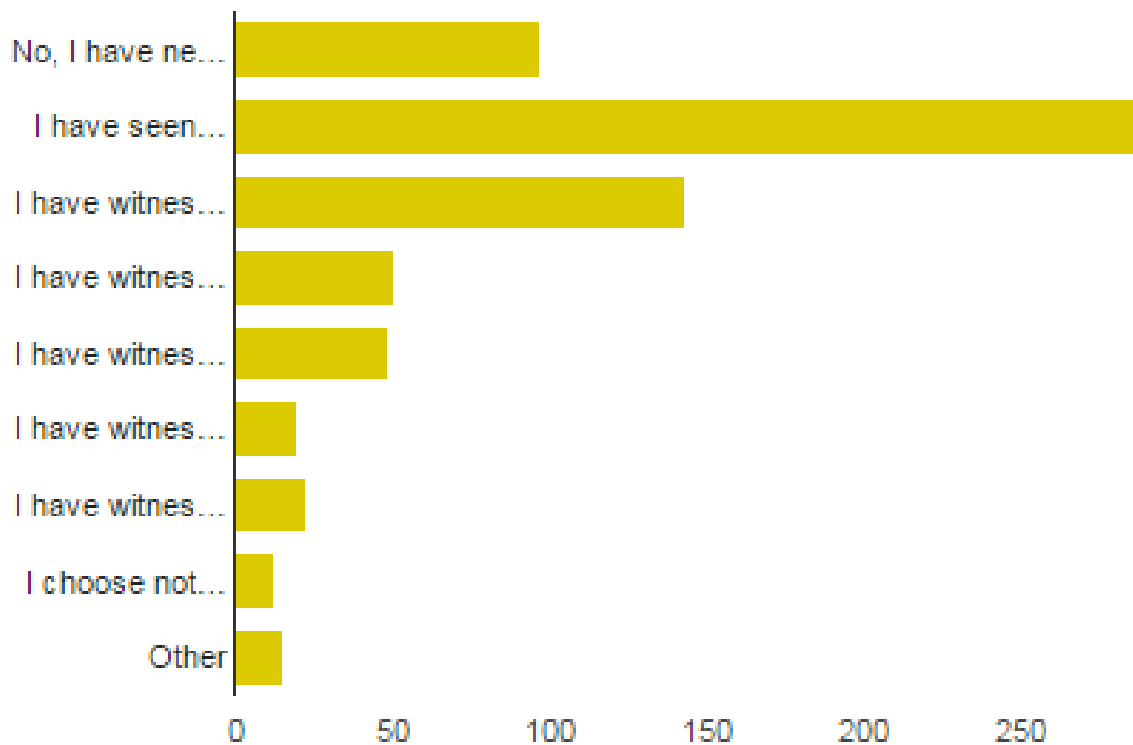| Region	Count	Percent
Northeast	86	18.1%
Central	152	31.9%
Southeast	118	24.8%
South	95	20%
East North Central	86	18.1%
West North Central	69	14.5%
Southwest	109	22.9%
Northwest	58	12.2%
West	108	22.7%
Alaska	11	2.3%
U.S. Pacific Islands / Hawaii	3	0.6%
Caribbean Islands	3	0.6%
Other countries in North America	14	2.9%
Other countries is Central America	3	0.6%
Other countries in South America	0	0%
Other countries in Europe	14	2.9%
Other countries in Africa	3	0.6%
Other countries in the Middle East	4	0.8%
Other countries in south central Asia	1	0.2%
Other countries in northern Asia	0	0%
Other countries in Southeast Asia / Orient	1	0.2%
Other countries in Polynesia / Pacific Islands	1	0.2%
Australia	1	0.2%
Other	10	2.1%

This shows that the area that most people have regularly worked in is the central region, followed by all of the southern regions and the west – no doubt due to the more temperate climate that allows fieldwork to be conducted year-round.

I then went into discussing problems in the field when it comes to safety and conditions. Future studies could include a focus on professionalism, respect for the resource and other issues that I did not get into here, but are important as well.

Sexual Harassment and Assault

Have you ever witnessed, or been a victim of sexual harassment or assault while on the job or at the camp/hotel?

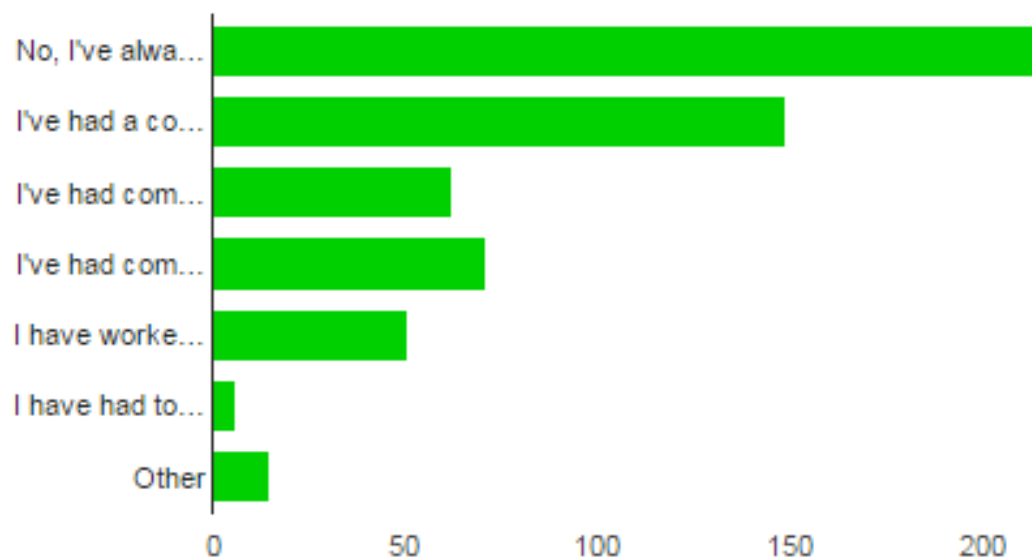| Option	Count	Percentage
No, I have never seen anyone harass much less assault someone else on the crew sexually.	97	20.4%
I have seen sexual jokes and adult themed innuendo, but it was never something that anyone openly felt uncomfortable with.	290	60.9%

I have witnessed / been a victim of others teasing someone else sexually, or making lewd jokes at someone else's expense.	144	30.3%
I have witnessed / been a victim of other people get overly aggressive about attempting to get another person to engage in a relationship	51	10.7%
I have witnessed / been a victim of direct harassment of others where someone has touched another person in a way that they found uncomfortable.	49	10.3%
I have witnessed / been a victim of sexual assault related to the job	20	4.2%
I have witnessed, or felt that I had to put up with sexual harassment / assault in the form of trading favors such as promotion, grades, prime survey/excavation location in return for sexual favors.	23	4.8%
I choose not to answer	13	2.7%
Other	15	3.2%

This chart is one that shows that while we are a bunch that have our minds in the gutter, almost 20% of participants have witnessed or been subjected to sexual harassment, with another 30% witnessing or being a victim of lewd jokes directed at someone else. These are themes that NEED to be addressed. As anthropologists we should be better than this. We should be able to show empathy and try to see things through another person's eyes. To compare this data with a

national study, I looked at the results of a study performed through the CDC ([Breiding et al. 2014](#)) which found *"An estimated 43.9% of women and 23.4% of men experienced other forms of sexual violence during their lifetimes, including being made to penetrate, sexual coercion, unwanted sexual contact, and noncontact unwanted sexual experiences. The percentages of women and men who experienced these other forms of sexual violence victimization in the 12 months preceding the survey were an estimated 5.5% and 5.1%, respectively."* While the results of this survey may show that the rates are lower than what was found nationally, it is still a matter that should be addressed by everyone.

Late Wages

Have you ever had a company that was late with the per diem or paychecks? If so, what then?


Response	Count	percentage
No, I've always been fortunate enough to get paid right on time when it was promised.	**216**	45.9%
I've had a company be late by a couple of days a time or two (usually first paycheck or during other unique situations that were somewhat understandable) but nothing that stood out as all that unusual	**149**	31.6%

I've had companies routinely be late with sending out paychecks or per diem	**62**	13.2%
I've had companies that were significantly late with paychecks or per diem (more than one week)	**71**	15.1%
I have worked for companies that did not distribute paychecks or per diem for over a month	**51**	10.8%
I have had to pursue legal avenues to gain pay from employers	**6**	1.3%
Other	**15**	3.2%

Over 40% of participants reported having companies exhibiting unreliable payment of one sort or another. For people who earn less than $40,000 and in essence often find themselves rolling into a project with nothing but fumes in the gas tank and having to be thrifty, the fact that companies have had these issues is unprofessional. I realize that many times it may seem like it is beyond their control, but good planning and budgeting should keep this from ever becoming a problem.

Discrimination

Have you ever felt that you have been discriminated against for promotion due to any reason (gender, heritage, age etc.)

No	292	61.6%
Yes	163	34.4%
Choose not to answer	9	1.9%
Other	38	8%
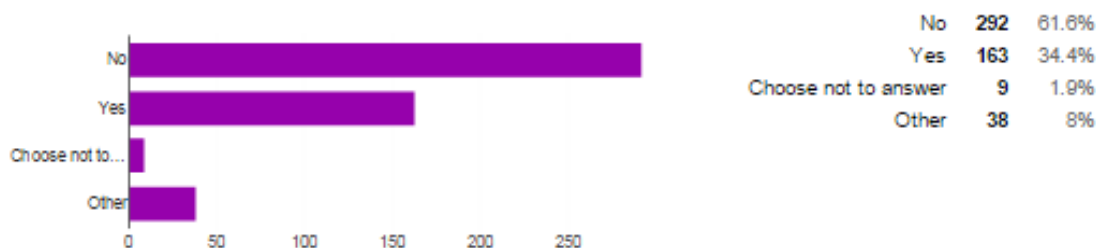
Again, we should be better than this as anthropologists. The fact that people feel discriminated against shows that communication needs to become better so that either people understand what they need to work on if a company is not hiring a person due to poor work performance, or so that a chain of responsibility can make sure that there isn't blatant discrimination happening, and if there *is* discrimination happening, it needs to be dealt with immediately.

Lodging

If your employer provides lodging for you while on a project how do you feel about their selections
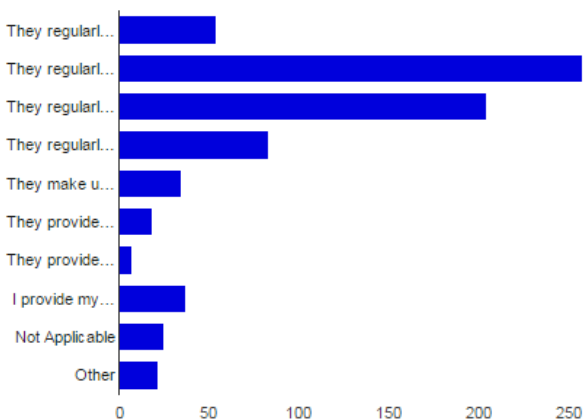
They regularly put us up in well equipped suites with kitchenettes etc. (Staybridge, Residence Inn, etc.)	54	11.4%
They regularly put us up in decent hotels that provide clean, comfortable accommodation (Comfort Choice, Holiday Inn,)	258	54.3%
They regularly put us up in places that may have seen better days, but are still acceptable	205	43.2%
They regularly put us up in fairly run down hotels that may have a variety of cosmetic, maintenance, housekeeping and other environmental problems	83	17.5%
They make us find our own accommodations	35	7.4%
They provide mobile lodging or camping equipment that is in good shape	19	4%
They provide mobile lodging or camping equipment that is in poor shape	7	1.5%
I provide my own lodging.	37	7.8%
Not Applicable	25	5.3%
Other	22	4.6%

The good news with this graph is although we often hear horror stories about some of the lodging that some folks have experienced, companies by and large put their crews up in acceptable lodging, though I'm sure there will always be the instances where a company puts a crew up in poor locations (sometimes due to the fact that it may be the only place to house a crew within reasonable driving distance/budget).

Other Issues that Participants Brought Up

The next question I asked allowed participants to add in any other issues and problems that they wanted to address. There were seven pages of comments, and made for some awfully negative reading. I will not post them as some could be used to identify participants. I went through them

all and broke them down into seven additional categories: **Integrity/Ethics** (concerns about companies not having integrity and ethics when it comes to the resource, crew, pay etc. as well as concerns about crew members and team leaders showing a lack of integrity when it comes to the resource and a poor work ethic), **Safety** (this is both on site and off site), **Pay** (which we have already discussed), **Working Conditions** (often these were closely tied to safety, but could also be things like providing adequate restroom facilities for crew, breaks, double occupancy of lodging, financial hassles such as drawn out processes to obtain per diem or lodging reimbursement) **Job Security**, and there were a few that had concerns about the need for **Standardization** when it comes to procedure, SHPO/THPO expectations, wages, etc. and a few that I placed into a category of **Other**.
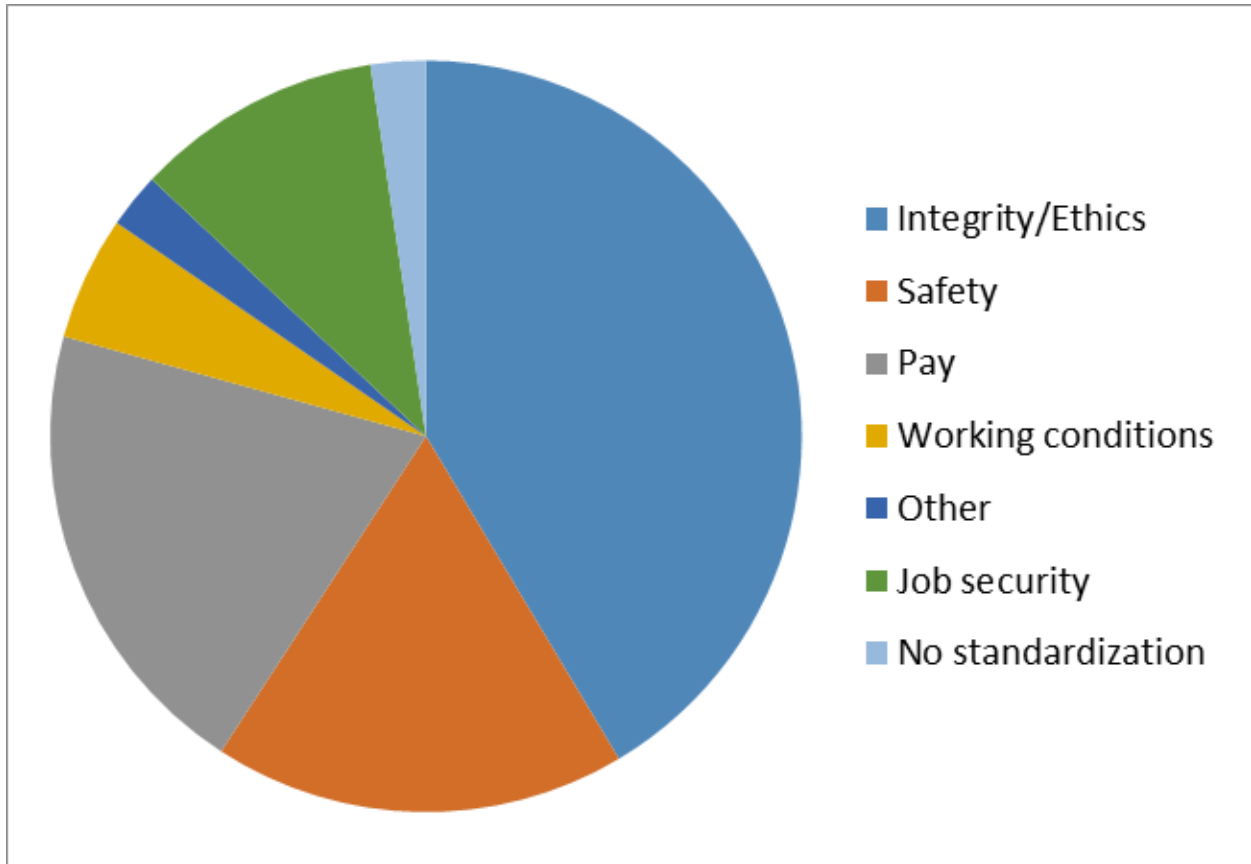
Integrity / Ethics: 70

Safety: 30

Pay: 34

Working Conditions:9

Other: 4

 Job Security: 18

No Standardization: 4

Legend:
- Integrity/Ethics
- Safety
- Pay
- Working conditions
- Other
- Job security
- No standardization

   I think all of these are important, but Safety and Integrity need to be addressed in a large way. Unlike environmental or financial resources, cultural resources are a nonrenewable resource. Despite what a client may want, despite what the budget, or the schedule or the profit margin, we should do the best we can to treat the resources with respect, and try to demonstrate integrity not only of the resources, but of ourselves; do the research, do the work and dig the holes - don't just go through the motions. We should keep an eye on each other and keep up each other's spirits and try to maintain our professional integrity when it comes to doing the work, and yes, at times, if someone is blatantly lacking integrity when it comes to their work, call them out on it, or bring it up to a supervisor. Not only can a crew member who lacks integrity do irreparable harm to the resources, but to the reputation of a crew, or even a company in general, potentially risking losing out on contracts because of bad word of mouth. A crew or company that has a bad reputation of integrity will also not draw the best employees either as they will want to take their talents and time elsewhere resulting in an integrity spiral.

Safety should always be a priority for everyone when it comes to fieldwork. This means not only talking about, and paying lip service to the basics like slip, trip, and fall hazards, environmental hazards, and biological hazards, but really following through on them, as well as hydration, sanitation, weather, and OSHA rules like trench safety etc. The issue of landowner communication and making sure that the crew has permission to be on a parcel with the land agents or clients. No crew should ever have to be confronted by a landowner with a firearm. At the same time, crew members shouldn't brandish firearms unless the situation calls for it (i.e. bear danger etc.)

Where do you see yourself in 5 years?

Where do you see yourself in five years?
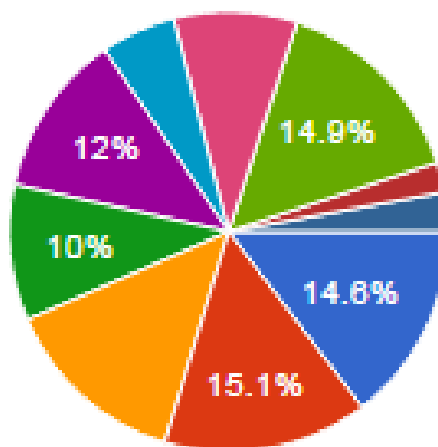
Response	Count	Percentage
Remaining in Cultural Resource Management, and remaining in the same general position I am in.	66	14.6%
Remaining in Cultural Resource Management, but with some slight movement in career (i.e. currently field tech, becoming crew chief)	68	15.1%
Remaining in Cultural Resource Management and obtaining a full time position in public service (State or Federal Government)	62	13.7%

Remaining in Cultural Resource Management and obtaining a full time position in a Private CRM firm	**45**	10%
Pursuing an advanced degree pertaining to Cultural Resource Management.	**54**	12%
Pursuing a degree (advanced or otherwise) in another field.	**25**	5.5%
Leaving Cultural Resource Management for the time being - may come back to it at some point.	**41**	9.1%
Leaving Cultural Resource Management in order to pursue a different line of work.	**67**	14.9%
Retirement from Cultural Resource Management - but I'm going to work somewhere else until I can properly retire.	**10**	2.2%
I will be enjoying Retirement.	**13**	2.9%

The last section that I put questions into was about the future, keeping up with archaeology, and memberships.

I found it interesting that the responses were spread fairly evenly throughout this question, with the outliers being retirement – again, I have a feeling this has more to do with demographics than overall trends in the profession with advancing life goals, requirements and career expectations may push people to find careers outside of archaeology, and few of those closer to retirement participating in the survey.

Keeping up With Archaeology Online

How do you keep up with archaeology online?
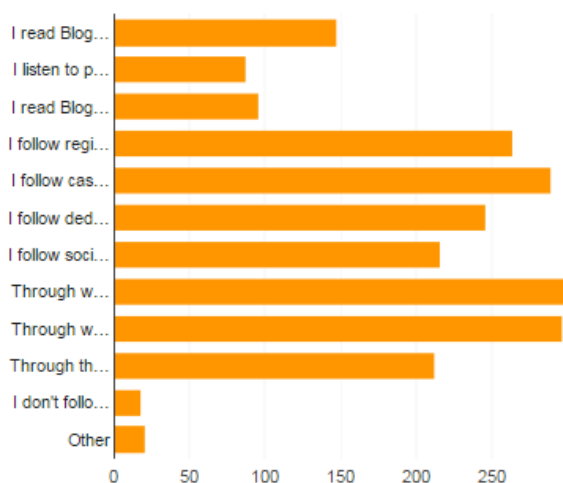
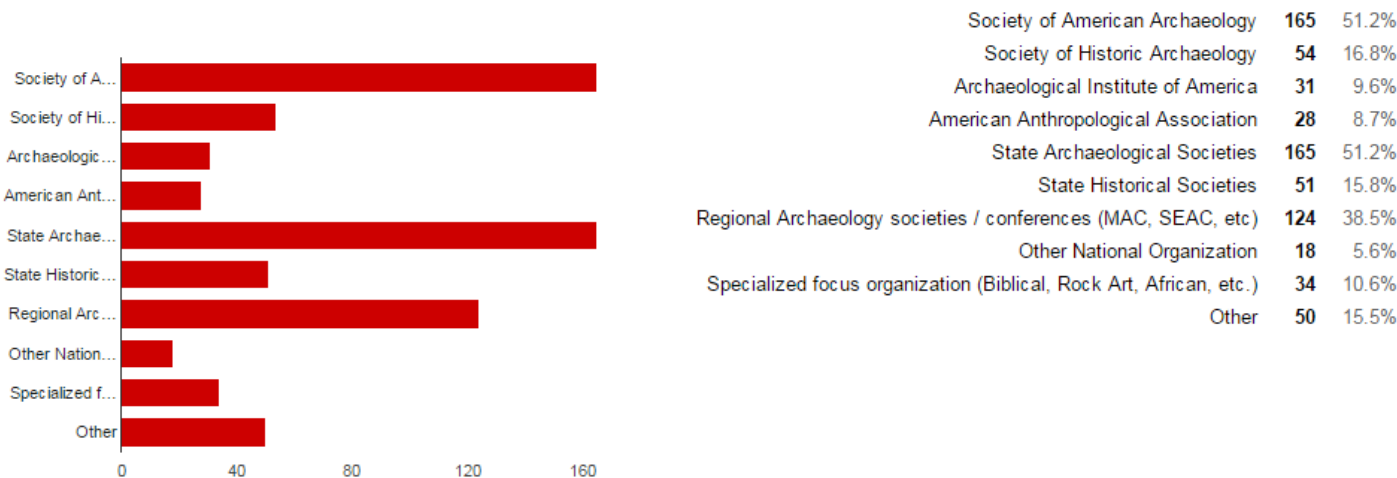| Answer	Count	Percent
I read Blog entries from progressive professional blogs such as DigTech (Random Acts of Science, CRM Collective) and Succinct Research etc.	148	31.3%
I listen to podcasts from the archaeology podcast network	87	18.4%
I read Blog entries from folks like Thomas King and other professionals / professors	96	20.3%
I follow regional groups (state / university archaeology societies etc.) on social media / facebook	264	55.8%
I follow casual social media / facebook groups (not necessarily professionals) about archaeology themes	290	61.3%
I follow dedicated professional archaeology groups on social media / facebook (archaeo field techs, North American Archaeological Tech Forum, etc.)	246	52%
I follow social media from established organizations such as SAA, AIA, SHA, etc.	216	45.7%
Through www.shovelbums.org	300	63.4%
Through www.archaeologyfieldwork.com	297	62.8%
Through the websites and online publications from established organizations such as SAA, AIA, SHA etc.	213	45%
I don't follow any of the above.	18	3.8%
Other	21	4.4%

I asked this mainly as a way to see how cohesive we are as a profession. While old standbys like shovelbums and archaeologyfieldwork.com and social media have large numbers of followers, some of the newer resources such as the Archaeology Podcast Network don't have as much of a following yet. This may be from lack of advertising, word of mouth, or interest. While the public at large may have a somewhat skewed idea of what cultural resources and archaeology are and why they are important (thanks to television etc.) these are resources that focus on our profession and I would encourage everyone to use these resources, and have the discussions to bring about changes that we would like to see. In the 40 years since the Society of Professional Archaeologists (SOPA) was founded, many things have changed, and while I'm sure that all of the existing organizations do their best to stay up with the changes in the field,

there is something about the blogs and podcasts that are available that have a much more immediate impact to their content.

Organizations

Do you belong to any organization that promotes archaeology and cultural resources?

Society of American Archaeology	165	51.2%
Society of Historic Archaeology	54	16.8%
Archaeological Institute of America	31	9.6%
American Anthropological Association	28	8.7%
State Archaeological Societies	165	51.2%
State Historical Societies	51	15.8%
Regional Archaeology societies / conferences (MAC, SEAC, etc)	124	38.5%
Other National Organization	18	5.6%
Specialized focus organization (Biblical, Rock Art, African, etc.)	34	10.6%
Other	50	15.5%

Here we see that the two biggest categories are the SAA and state archaeological societies, each with 51.2% of participants belonging to these groups. With membership fees at a much more reasonable level, state and regional societies are worth financial and personal investment and allows people to get to know each other better in the profession – and if state and regional memberships rise – potentially with a younger membership, they can adapt to what new members would like to see out of their memberships – they are what you make them, so it wouldn't hurt to put in some effort and time and get to know other folks that you might not otherwise see, but have common interests!

Technology

How do you feel about technology on the job?
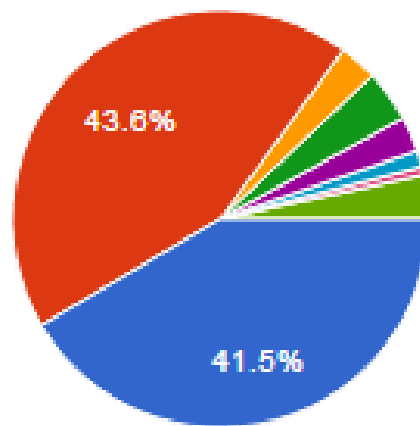
Response	Count	Percentage
I'm all about using technology on the job! I am an archaeo-cyborg!	**197**	41.5%
It's an interesting concept. I use some of the established technologies (GPS units, Total Stations, etc.) but many of the new technology pieces have too many liabilities for reliable field use yet.	**207**	43.6%
I like using some technology in other aspects of my life, but this type of work is best served with hard copies of stuff.	**14**	2.9%
Don't really Care	**19**	4%
Technology has limited applications in the field - I still prefer to survey using a paper map and compass.	**13**	2.7%
Damned newfangled gadgets and gizmos - get out there, dig a hole, write it down and stop wasting time!	**6**	1.3%
Technology? What? My dear chap, hand me my pith helmet and a gin and tonic!	**3**	0.6%
Other	**16**	3.4%

It is apparent that technology is the way of the future with many of the participants of the study. While many may not feel as comfortable with the new technology as others, the more the technology becomes a proven part of life in the field the more readily they will use it. I strongly

feel that the more companies fully realize what technology can save them in labor hours and redoing work, it ultimately makes up for the initial investment very quickly. It will be interesting to see how technology companies adapt and market to these changing needs. It will also be interesting to see what the increase in technology may mean for the labor market for those people whose hours are being saved. While I don't predict archaeology robots any time soon, the advent of satellite imagery and the use of associated technology such as that by Sarah Parcak, winner of the 2016 TED Prize, may one day be advanced to the point where a large percentage of sites will be able to be detected by a small number of people on a computer with a small number of people required to go out and check for deeper deposits and verify computer findings – but the more companies practice flag-and-avoid methodology in CRM, this could result in even fewer jobs.

How do participants consider themselves?

Do you consider yourself to be a cultural resources professional / professional archaeologist?
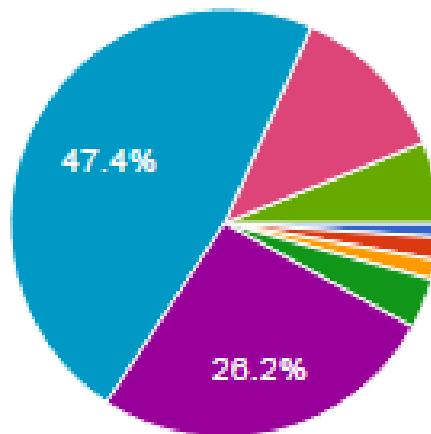
Responses	Count	Percentage
No, I do not consider myself an archaeologist or cultural resource manager	5	1.1%

No, I consider myself an amature	**8**	1.7%
No, I consider myself an avocational CR / Archaeologist	**7**	1.5%
I'm not exactly sure, or I've never really thought about it	**18**	3.8%
Yes, anyone who gets paid to do this is a professional	**124**	26.2%
Yes, though I may or may not be a member of the Register of Professional Archaeologists or other professional group	**224**	47.4%
Yes. I have an advanced degree and believe that only with the benefits of an advanced degree can one properly be called a professional Cultural Resource Manager / archaeologist.	**58**	12.3%
Other	**29**	6.1%

This gets to the heart of what I think is a problem in our profession of who is a 'professional'. Many of us who do cultural resource management or archaeology do an awful lot of digging, but we are not given the chance to write anything other than level forms and summaries about our work – we are often given instruction to *not* write or talk about a project because of sensitivity issues, or about who owns the rights to the final report etc. Participants by and large consider themselves professionals, despite what any other organization may have as a requirement to be considered a 'professional'. This is also a matter of some concern as I have heard of many who feel that there is a divide between 'professional' archaeologists, and those who do not qualify for such a designation due to a lack of publications or specific degrees etc. Regardless if such a gap actually exists, the perception is there, and is something that should be addressed as a matter of respect for colleagues.

The last pair of questions I asked were a bit more pointed towards a separate goal – that of forming an organization focusing on field technicians and other project hires. There have been many people who have been discussing something like this. I'm still not sure what this would look like, as it is still very ephemeral.

Interest in Project Hire Organization and Costs

Would you be willing to join an organization focused on the community of CRM project hires?
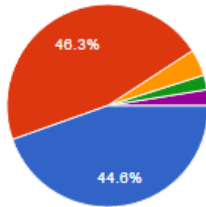
Yes	210	44.6%
I would have to learn more about it before I could say	218	46.3%
No, there are enough organizations already	20	4.2%
No, I don't think there is a need to work at becoming a community.	11	2.3%
Other	12	2.5%

If you would be interested in joining the organization mentioned above, how much would you be willing to pay in membership costs / du
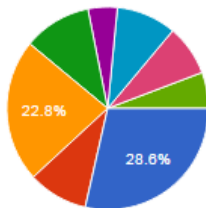
make it flexible so that you give what you can when you can	134	28.6%
$10.00	45	9.6%
$25.00	107	22.8%
$60.00 (averages out to $5.00/month)	51	10.9%
120.00 (averages out to $10.00/month)	22	4.7%
I'm broke enough as it is, I wouldn't be able to give anything	45	9.6%
I would not choose to join this type of organization	38	8.1%
Other	27	5.8%

It is evident that there is a great deal of interest by participants in forming such an organization however, and now that we have the close communication tools such as a wide internet and social media it would make such an organization far easier to organize and manage than before. Creating digital publications, newsletters etc. would also reduce overall costs for operations etc. Costs for members would depend on what services the organization provides. I have heard many ideas kicked around – everything from a straight up union, to something similar such as a guild, to just an organization similar to the RPA for field techs. I have heard discussion about forming something that would allow us to obtain group health insurance, and even some discussion where it would act as a clearinghouse where companies would hire teams, which would allow people to more easily obtain year round work if they wanted it. As with anything else, this will take a good deal more discussion to nail down exactly what is desired, what is realistic, and what we can do – but at least 90% of participants are potentially interested in such an organization, so we should be able to get this done.

Further Analysis of the Data

I chose to then take the data and do some comparisons of some of the categories.

Wages and Income By Gender

The first I chose to examine was comparing hourly wage to gender to see if there was a significant pay gap between the genders:

Comparing Wages by Gender

	< $10.00 per hour	$10.00 - $12.00 per hour	$12.01 - $14.99 per hour	$15.00 - $18.00 per hour	$18.00 - $24.00 per hour	$25.00 - $30.00 per hour	> $30.00 per hour	No anwer
Transgender	0	0	0	0	0	1	0	0
Male	5	3	30	74	75	21	21	0
Female	10	9	43	75	75	19	8	2
Choose not to Answer	0	1	0	2	2	0	0	0
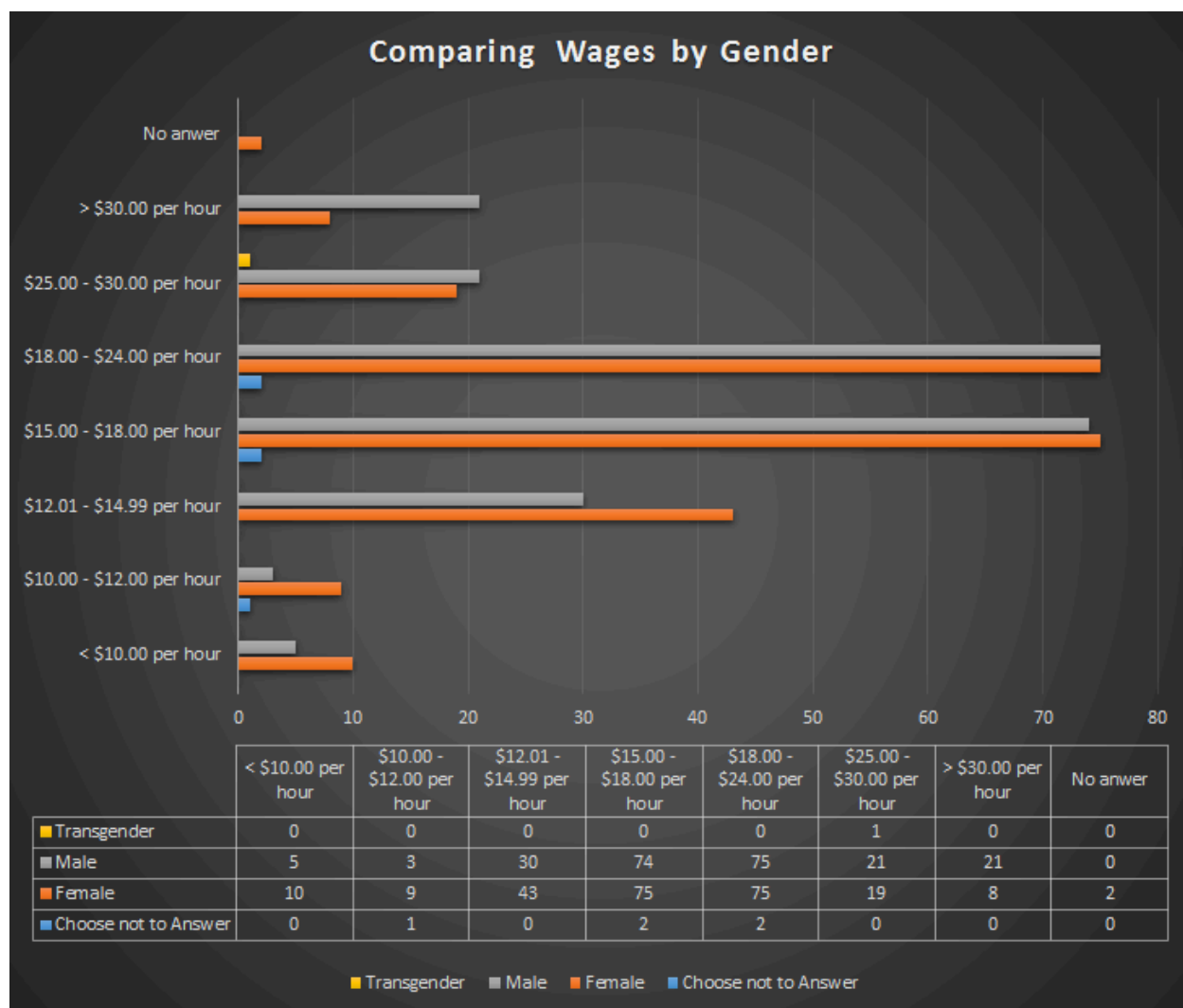
While there does seem to be a pretty good degree of equality in most areas, at the low end there are twice as many women making less than $10/Hour and there are three times as many women making $10-$12/Hour as there men making those wages. On the high end making over $30/Hour the ratio is close to 2 ½ times the number of men to women, indicating that while it can be broken, there does seem to still be a sort of a glass ceiling in our profession – at least when it comes to these participants.

Annual Income by Gender

	No Answer	<$10,000	$10,000 - $20,000	$20,000 - $30,000	$30,000 - $40,000	$40,000 - $50,000	$50,000 - $60,000	$60,000 - $70,000	$70,000 - $80,000	$80,000 - $90,000	>$90,000
Transgender	0	0	0	0	0	1	0	0	0	0	0
Male	3	8	44	73	57	18	13	2	3	2	6
Female	2	24	53	98	38	20	3	2	1	0	0
Choose not to Answer	0	2	1	0	1	1	0	0	0	0	0

■ Transgender   ■ Male   ■ Female   ■ Choose not to Answer
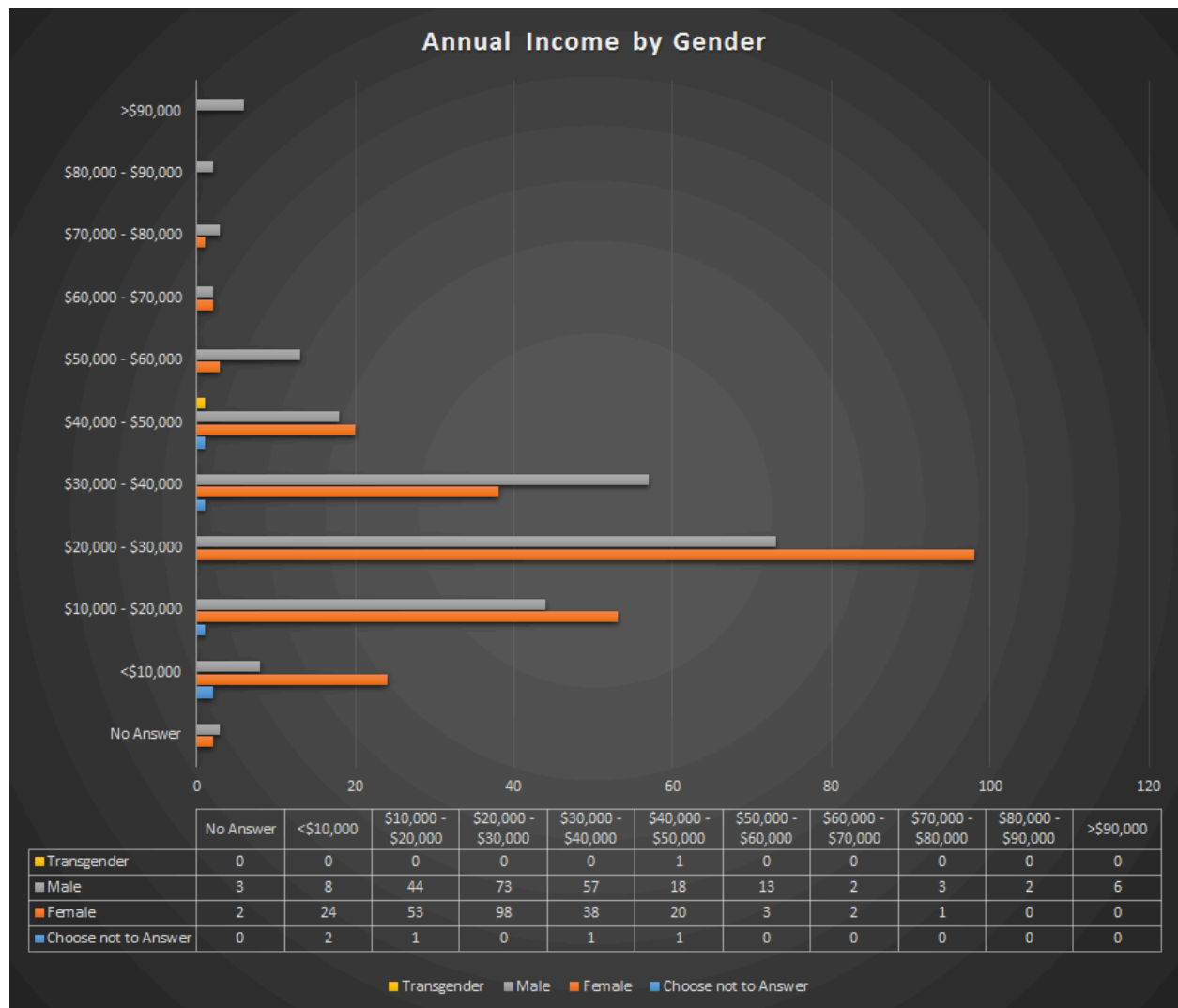
A somewhat similar trend can be seen when comparing annual wages to gender – here we see men have a much count in higher annual wage in everything over $50,000 per year, while 33% more women make $20,000-$30,000 per year compared to men. 50% more men make $30,00-$40,000 per year. Again, indicating what could be seen as a glass ceiling. On the other hand this could be simply differences in education, position, or year-round working conditions etc. A survey on a larger scale will no doubt be able to flush this out should one ever be produced.

Education to Wages and Income

Hourly Wages by Education
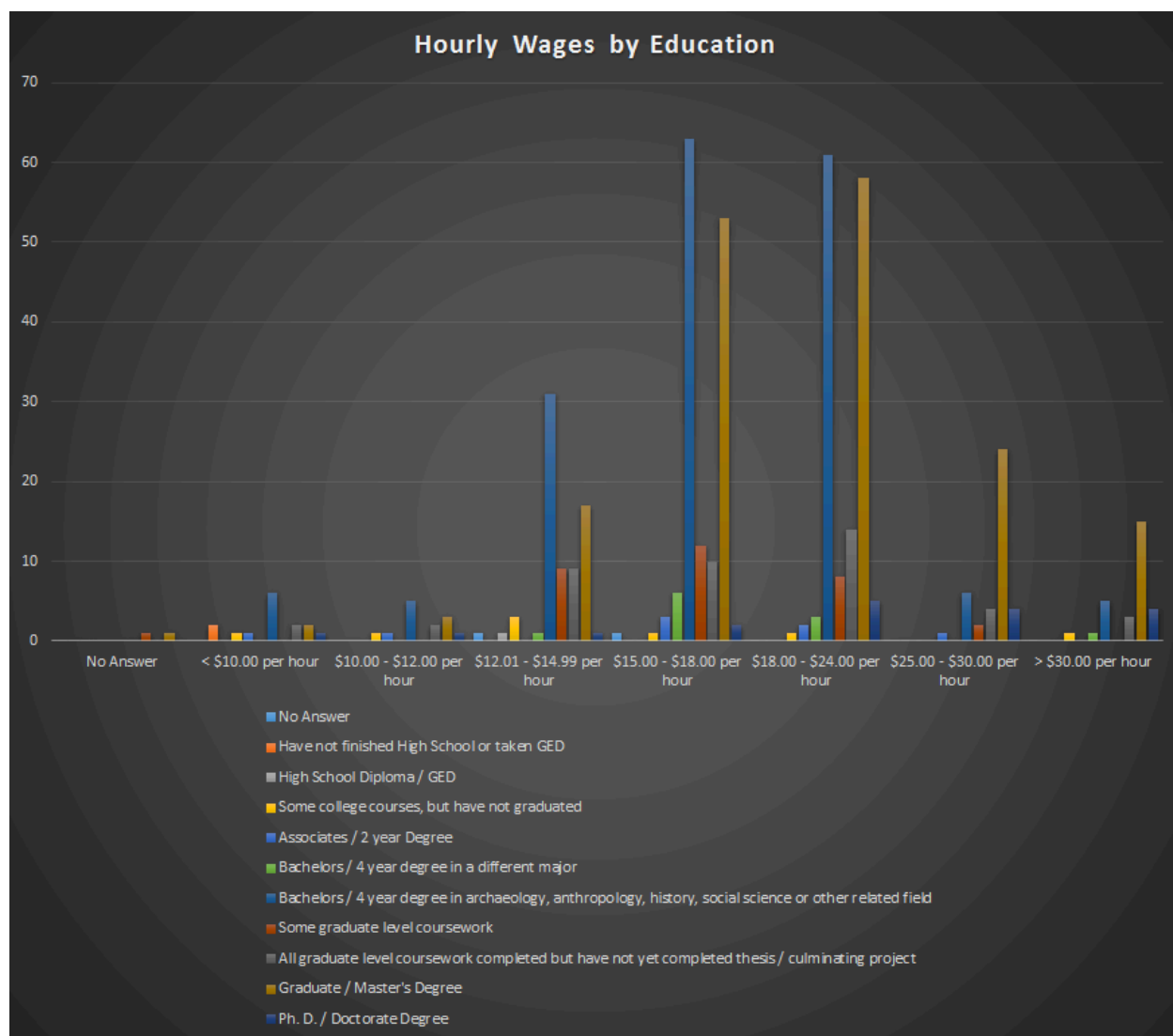
Here we can see some of the differences in education levels and wages. As the original survey response on wages shows, the largest block is between $15 and $24 per hour. This graph shows that while the majority of people with a Bachelors and Master's earn roughly the same rate (between that $15-$25 range), a master's degree or a doctorate degree does allow a person to break into that $25+ category ($28.50/Hour would put someone around that $59,280 median income that the BLS states.)

Anthropologists and Archeologists
Median annual wages, May 2014

Social scientists and related workers	$71,030
Anthropologists and archeologists	$59,280
Total, all occupations	$35,540

Note: All Occupations includes all occupations in the U.S. Economy.

Source: U.S. Bureau of Labor Statistics, Occupational Employment Statistics

Adjusted Annual Gross Income by Education

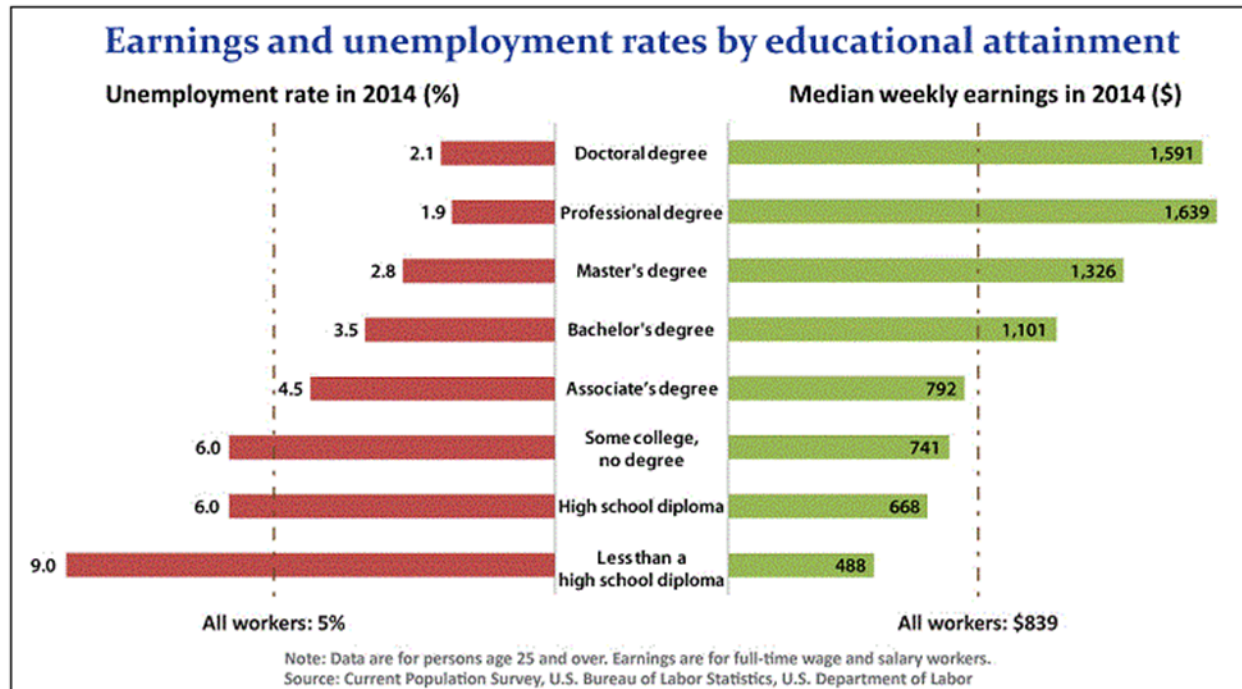|	No Answer	<$10,000	$10,000 - $20,000	$20,000 - $30,000	$30,000 - $40,000	$40,000 - $50,000	$50,000 - $60,000	$60,000 - $70,000	$70,000 - $80,000	$80,000 - $90,000	>$90,000
No Answer	2	0	0	0	0	0	0	0	0	0	0
Have not finished High School or taken GED	0	0	2	0	0	0	0	0	0	0	0
High School Diploma / GED	0	0	0	1	0	0	0	0	0	0	0
Some college courses, but have not graduated	0	2	3	2	0	0	1	0	0	0	0
Associates / 2 year Degree	0	2	0	1	3	1	1	0	0	0	0
Bachelors / 4 year degree in a different major	0	0	4	2	3	1	0	0	1	0	0
Bachelors / 4 year degree in archaeology, anthropology, history, social science or other related field	0	16	46	74	26	11	2	0	1	0	1
Some graduate level coursework	0	2	12	9	6	3	0	0	0	0	0
All graduate level coursework completed but have not yet completed thesis / culminating project	1	5	10	16	8	0	3	0	0	1	0
Graduate / Master's Degree	1	7	19	63	44	21	8	3	2	1	4
Ph. D. / Doctorate Degree	1	0	2	3	6	3	1	1	0	0	1

We see the overlapping bell curves that illustrate the differences between education and annual salary. Again, with a larger sample size, targeted towards an audience that would consist of more people that have a Ph.D. or Master's degree these numbers may change drastically – particularly for those holding a Ph.D. But again, when you compare it to the chart from the BLS on average income for education it shows that for the level of education that we obtain to perform the job,

we are not paid what our education is worth.

Earnings and unemployment rates by educational attainment

Unemployment rate in 2014 (%)   **Median weekly earnings in 2014 ($)**

Unemployment rate	Education level	Median weekly earnings
2.1	Doctoral degree	1,591
1.9	Professional degree	1,639
2.8	Master's degree	1,326
3.5	Bachelor's degree	1,101
4.5	Associate's degree	792
6.0	Some college, no degree	741
6.0	High school diploma	668
9.0	Less than a high school diploma	488

All workers: 5%   **All workers: $839**

Note: Data are for persons age 25 and over. Earnings are for full-time wage and salary workers.
Source: Current Population Survey, U.S. Bureau of Labor Statistics, U.S. Department of Labor

I then found another page more fully detailing our profession that shows the mean of hourly and annual wages. showing hourly wages of just shy of $30, resulting in an annual wage of over $61,000. This site is *full* of all kinds of interesting statistics about the field.

National estimates for this occupation: Top

Employment estimate and mean wage estimates for this occupation:

Employment (1)	Employment RSE (3)	Mean hourly wage	Mean annual wage (2)	Wage RSE (3)
7,040	5.5 %	$29.80	$61,980	1.0 %

Percentile wage estimates for this occupation:

Percentile	10%	25%	50% (Median)	75%	90%
Hourly Wage	$16.63	$21.15	$28.50	$37.02	$45.03
Annual Wage (2)	$34,580	$43,990	$59,280	$77,000	$93,650

Despite the naysaying of some of those who may have been doing this for a long time, and who talk about how we should sacrifice for the archaeology, getting paid half of what a person is worth (and what we are told to expect when we graduate with a degree that we have invested

tens of thousands of dollars in because we *need that degree*) is one hell of a sacrifice that I don't think we should have to make, but perhaps I'm being unreasonable.

Conclusions

While many of these findings may seem to be depressing, they should be a rallying cry for not only changes in the profession, but for a larger effort to gain a better understanding of our profession as a whole, and regularly update that information so that we can begin to set goals and benchmarks. Matters of integrity are always important, but often these are well argued and already discussed by professional organizations, but we need to start having a larger discussion about the industry at large.

As this field has transitioned from a model that is largely research and resource based, to an industrial and consulting based model (that yes, also includes research and a focus on the resource), we need to act as an industry and indeed as a community - even for those who are at the bottom of the ladder. With a community of perhaps only 15,000 people throughout the U.S. it really is quite a small community - we should be able to all pull together to do better together.

Let me be clear - I am not arguing that a person just graduating with a bachelor's degree is entitled to all that much (though to be honest, a degree should entitle them to *some* respect, an expectation of clear, honest communication, and an income that they can afford to pay off that education as well as live a modest life - though really that is up to them). Someone with a graduate degree, or who has years of demonstrated work experience should be worth that experience, and that education. It will result in a workforce that is more focused on the resource, on the research, and on the fantastic opportunity we have at an amazing career. We decided to pursue a career in this field for the passion that we feel, and I think it's high time we feel the passion rather than the pain.

If one way we can move to restore the passion to the many people who seem to have had that passion quenched is to form an organization for project hire and field staff, perhaps that is what we should do - not to cause a rift, but to bring resolution. We are all in this together and as the recent events in Wisconsin, Florida and other areas have demonstrated our industry and careers are not a sure thing and will no doubt be in the crosshairs of politicians in the future - but while we are here, and while we can, let's try to make a living out of it.

Lastly, let's work to proactively solve some of the problems that this survey points to and not let them continue to fester. If you disagree with these findings, great! I encourage you to continue researching for yourself these problems, show that things are better than what this survey seems to show. I can't express enough the need for a comprehensive census of archaeologists throughout the US if not North America, as well as a larger survey that I hope this inspires.

As always, be excellent to each other!