

PACIFICA

**WINTER/
SPRING
2023**

**PRESIDENT'S
COLUMN**

Kris Bezdecny speaks to metal, travel, and a good reason for putting a future meeting in Fairbanks.... p.4

**TREASURER'S
REPORT**

The state of our accounts following the Bellingham meeting. p.12

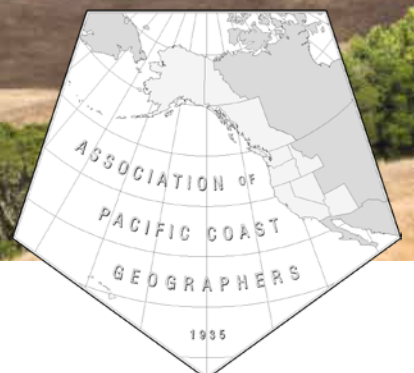
**REGIONAL
COUNCILOR REPORT**

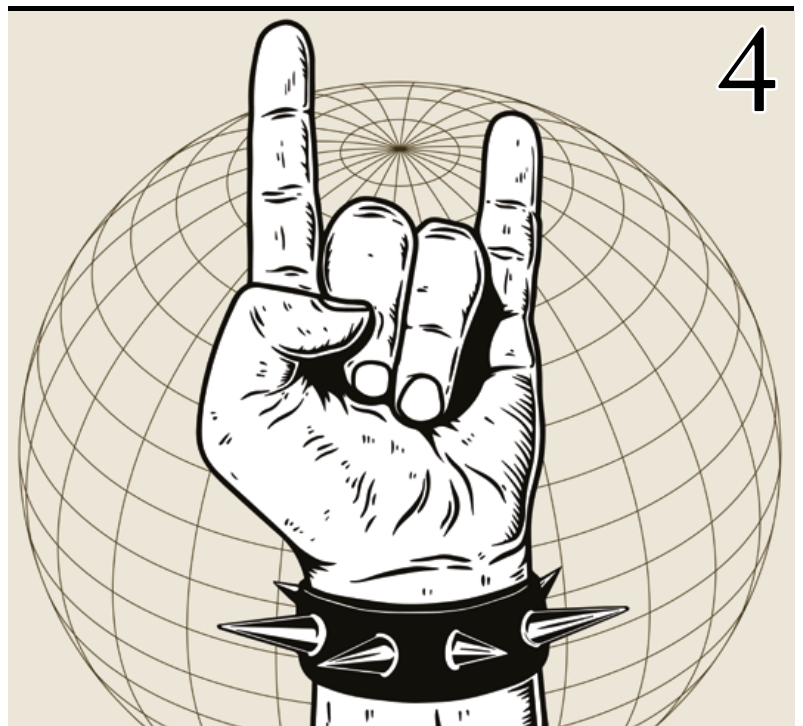
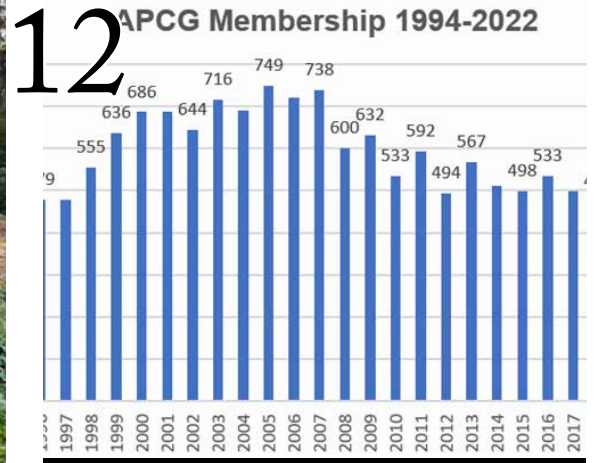
Dydia Delyser keeps us apprised of what is happening with the AAG. p.14



Modeling Carbon in Oak Woodlands

Cal State Long Beach's Brendan Schultheis, Paul Laris, and Scorr Winslow are working on a new method to measure biomass with drones. p.6





14

THE KIDS ARE ALRIGHT

I don't know about you, but I am feeling positive about the future of geography education as well as our future geographers. You fool!, you say. Don't you know that student enrollments are down? Yeah, and I've dealt with schedule nightmares and class cancellations, but life's too short to wallow in misery and all that. Ever forward.

While my full-time gig is still at Antelope Valley College, I've had the great opportunity to help out as a lecturer with geography and urban studies departments at CSUN and Cal State Long Beach. I'm telling you, the future is bright.

First, let's talk about lecturers. I did a little adjunct work early on, but I never really experienced the nomadic existence that is a lecturer at a Cal State University. Adjunct faculty are appreciated but the gig itself is a hard one. The lack of job security or, in a state like California, the lack of a truly livable wage is something all faculty, tenured or not, should be fighting for. We tenured folk have it good and should be bringing others in.

Now back to the wonderful students. At AVC, I get to convert unsure undergrads away from their nebulous "business" degrees and into something to which they are better suited, whether it's a full-on GIS career or something like history with a geography minor. At the CSUs I have been working with upper division and graduate students (some of whom I had gotten to switch years earlier). I now get to see students fully committed to this discipline. They love viewing the world differently, using incredible technology as well as critical theory and rigorous methods to do so, and feeling like they can make a difference the moment they graduate. Check out Brendan Schultheis' work on page 6 for an example.

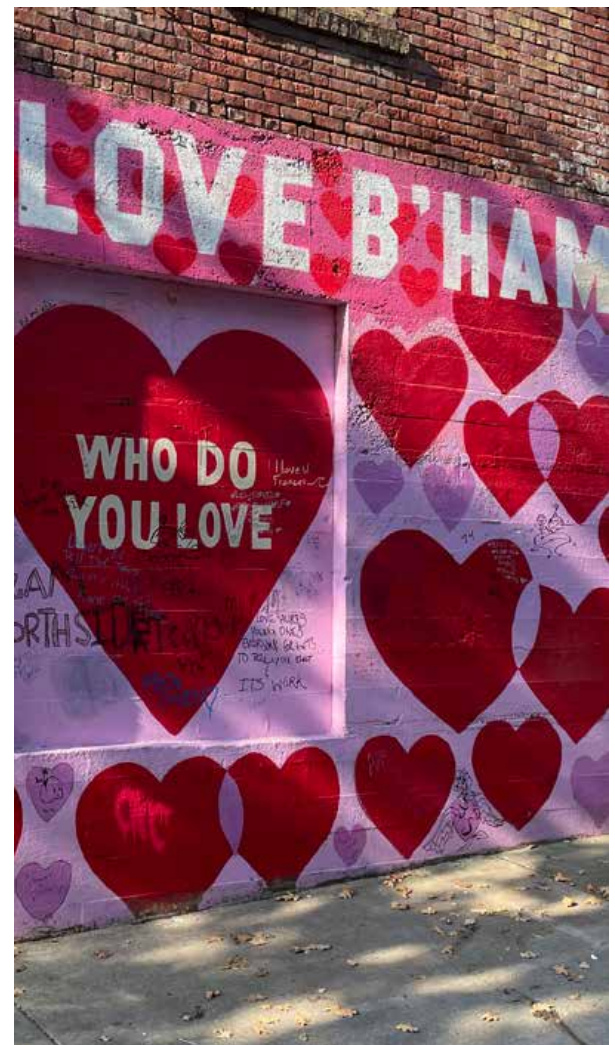
While our department numbers might be down, the students we do have are fantastic. They are missing out on the sense of community our departments had pre-2020 though. If we want to grow our numbers, we need to move beyond just our course offerings and make our departments the vibrant hubs of intellectual activity and nerdy fun they used to be. We attract the students who don't readily fit in with the big departments and we will only keep doing so with gatherings and events that allow these students to find their home. Rather than hope our catalog descriptions do the work, let's actively start showing the other students around the university just what they are missing...

Best,
Mike Pesses

Antelope Valley College, Lancaster, Calif.

CONTENTS

- 04 President's Column
- 06 Modeling Carbon Content
- 08 Candidate Bios
- 12 Treasurer's Report
- 14 Regional Councilor Report
- 18 Business Meeting Minutes
- 19 Call for Content
- 19 APCG Directory
- 22 New Members
- 23 Student Award Winners



ABOUT THE APCG

Founded in 1935 by a gathering of geographers including graduate students and faculty from universities, normal schools, and junior colleges, and a few individuals from government and industry, the Association of Pacific Coast Geographers has a long and rich history promoting geographical education, research, and knowledge.

Members gather at the annual meetings for social and intellectual interaction. They receive the annual *Yearbook*, first published in 1935, that includes abstracts of papers from the meetings and a number of full length peer-reviewed articles. Members also receive the biannual newsletter *Pacifica*, first published in Fall 1994. Since 1952 the APCG has also been the Pacific Coast Regional Division of the American Association of Geographers (AAG), serving AK, AZ, CA, HI, ID, NV, OR, WA, BC, and YT.



PRESIDENT'S COLUMN: KRIS BEZDECNEY



Wherever I may roam!! *The Black Album* came out when I was a teenager, and this song by Metallica immediately spoke to my wandering, and wanderlusting, heart. By the time this album dropped, I had moved 15 times in my life, most of those moves being cross-country. By 21 I had been to 46 U.S. states; now it's up to 48. (One day, Alaska and Maine...)

Travel has always represented an integral part of the geographer's craft, whether that travel is just down the street, a few states away, or across the globe. Travel allows us to experience different landscapes: the built and social landscapes of a city,

the physical and social landscapes of a national park, ... That travel is also what turns spaces in their abstract sense into places that have experiential meaning to us.

What happens, then, when we have to restrict travel? California represents a spatial sink for APCG membership. We have to consider the needs of our members from California when the state has banned travel to several states, limiting our annual meeting options for the region as a whole. We will not be returning to Flagstaff or any other location in Arizona any time soon; nor is Couer d'Alene or other venues in Idaho an option in the

foreseeable future. None of the faculty, students, or other state-funded professionals from California would be able to attend conferences in these states without the state funds that usually fund or subsidize such annual meeting travel. Because California can't come, the regional meeting as a whole is limited.

We've also discussed a possible joint future annual meeting with Great Plains / Rocky Mountains or SWAAG. Similar constraints apply, however: the 2023 SWAAG meeting in Laredo Texas would be out, as would the 2023 GPRM meeting at South Dakota State University.



The underlying issue impacting our travel options is one of humanitarian values. The State of California is putting its money where its mouth is: not allowing state funds to be used to travel to states with laws that discriminate against LGBTQI+ communities and individuals. As the fifth largest economy in the world (some reports in the Fall stating it has become the fourth largest economy), California is using its economic power as pressure on states with such discriminatory laws, while also using this policy to socio-politically distinguish itself from these states at the state level. (There is significant... variation across the regional sociopolitical landscape that is California...)

The rub, however, is that there is also significant variation within the 23 states that California has banned from state-sponsored travel. These states include LGBTQI+ communities (as well as immigrant communities,

communities of color, and people who identify as women who are also experiencing reactionary policies being enacted and enforced as we read this) that could use more support from allies in California and other locales. In other words, geographers of Idaho and Arizona, we see you. And we wish to include you, not exclude you, from APCG meetings.

To that end, while some states are off the table for the foreseeable future as meeting sites, we will continue to work to expand the areas within the APCG region in which we host meetings, knowing that there is always a strain on travel from those most distant from a meeting any given year. We will also continue for the foreseeable future to host our meetings as 100% hybrid: if you cannot travel to our venue, for whatever reason, we still want to make it as seamless as possible for you to participate in our sessions and major events.

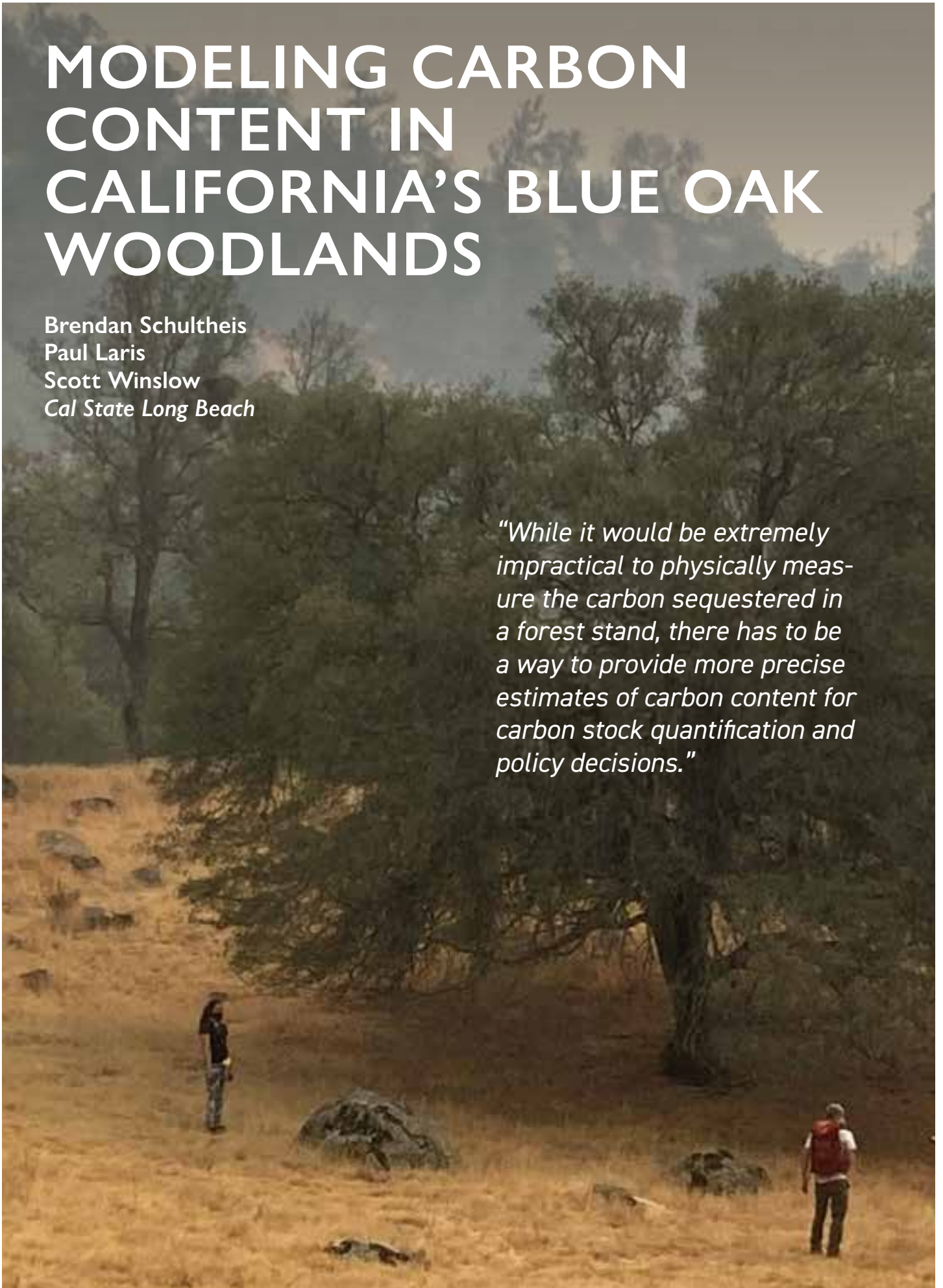
Continued p. 13



MODELING CARBON CONTENT IN CALIFORNIA'S BLUE OAK WOODLANDS

Brendan Schultheis
Paul Laris
Scott Winslow
Cal State Long Beach

"While it would be extremely impractical to physically measure the carbon sequestered in a forest stand, there has to be a way to provide more precise estimates of carbon content for carbon stock quantification and policy decisions."



The increasing rate of natural hazards and the sharp deterioration of ecosystems resulting from the changing climate has led to governmental policies and initiatives to address factors contributing to climate change. For example, programs relating to the reduction of greenhouse gases—namely carbon dioxide (CO₂)—have become a prevalent means of mitigating climate change. Carbon offset programs allow firms to counteract their CO₂ emissions by purchasing carbon credits, or, in other words, investing money (proportionate to the amount of carbon they emit) into programs that will capture and store atmospheric carbon. However, there have been serious concerns revolving around carbon offset programs, specifically in terms of the level of accuracy when quantifying carbon. Private companies and large forest carbon programs alike typically quantify the amount of carbon credits a forest stand is worth based on baseline estimates and generalized models which leads to inaccuracies. While it would be extremely impractical to physically measure the carbon sequestered in a forest stand, there has to be a way to provide more precise estimates of carbon content for carbon stock quantification and policy decisions.

Carbon offsetting has often taken the form of planting or preserving forest stands due to their ability to sequester carbon. Forests are the largest terrestrial carbon pools, and thus play a significant role in the global carbon cycle. They act as the largest terrestrial carbon sink, effectively reducing atmospheric carbon and slowing down climate warming. Biomass, as dry weight, is approximately 50% carbon, and forests comprise 70-90% of terrestrial aboveground and belowground biomass. (Cairns et al., 1997; Houghton et al., 2009). Aboveground biomass (AGB) is specifically of interest as it comprises roughly 70-90% of forest biomass. Moreover, while belowground biomass (BGB) is physically and chemically protected, AGB is in a continuous state of flux due to natural and anthropogenic disturbances; thus, AGB contributes to atmospheric carbon fluxes to a higher magnitude. Aboveground biomass is ephemeral in nature; while forests are the largest terrestrial carbon sink, they also have the potential to be one of the largest emitters of carbon when ecosystems are disturbed. It

is crucial that we obtain thorough, accurate, and frequent measures of aboveground biomass in order to make effective policy decisions and better understand fluctuations to global atmospheric carbon levels. Accurate monitoring of forest biomass is necessary for carbon stock quantification, forest ecological management systems, and climate change impact assessment. Nonetheless, current methods for measuring biomass are extremely limited in either their extent, labor involved, accuracy, and/or cost.

The use of unmanned aerial vehicles (UAVs), or “conservation drones,” for environmental study and management has expanded exponentially in recent years. Imaging with UAVs allows for far greater coverage than in situ data collection, they can extract extremely accurate canopy and height metrics through high resolution imagery, and are inexpensive compared to purchasing satellite imagery, aerial imagery, or LiDAR data; thus, making them much more efficient, less labor intensive, and more cost effective than other methods. Current methods for inferring AGB and carbon content have extreme limitations; more direct methods are too cost-prohibitive, labor intensive, and time consuming to be conducted at a large scale while indirect methods such as using remote sensing (RS) data suffer from a lack of precision. However, very little research has explored fusing remote sensing data with in situ techniques to cover the weaknesses and exploit the strengths of each method. Consequently, my working hypothesis is that employing remotely sensed variables into species-specific allometric equations will prove to be a useful method for estimating above ground biomass. This research has been conducted to test the efficacy of using UAV imagery and allometric equations to measure above ground biomass in a blue oak woodland environment on River Ridge Ranch, California.

Theoretical Framework

Obtaining accurate and frequent measurements of forest biomass is crucial for a multitude of reasons. For instance, biomass is the raw material of food, fiber, and fuelwood. Forest biomass is an important indicator of ecological health as it is related to veg-

Continued on p. 10

CANDIDATES FOR THE 2023 APCG ELECTION

Voting starts May 1, 2023

For President: Fernando Bosco, Professor and Chair of San Diego State University

Ph.D., Geography, The Ohio State University, 2002

M.A., Geography, The Ohio State University, 1997

B.A., Geography, Wittenberg University, 1994

I am currently serving as APCG vice-president and very happy to be running for the position of president. The APCG is a very special organization that continues to do a lot for our discipline and for our students, who are given new opportunities through different grants and awards. I was introduced to the APCG when I joined San Diego State University by the late Larry Ford, who encouraged me to become active right away. I followed his advice and through the years I have remained involved. I was one of the organizers of the 2009 APCG meeting in San Diego and, for several years now, I have served in the Latina/o American Travel Scholarship committee. I am also involved with the national AAG in different ways. Recent activities on behalf of the AAG have included a couple of AAG Leadership Webinars (2021), serving as Nystrom Award Committee member (2020) and serving as a member of the Enhancing Diversity Committee member (2016-2018).

My hope is to continue building on the legacy and work of our present and past APCG leadership to make sure our organization remains as vibrant as ever. This is ever so important after the disruptions resulting from the global Covid-19 pandemic. I hope to contribute to enhancing our sense of community so our students and a new generation of geographers can enjoy the APCG meetings and networking opportunities as much as I have.

About my research and teaching:

I am a critical human geographer who works at the intersections of urban, social, and political geography. My work in Argentina has focused on the geographic dimensions of human rights activism and the politics of memory. More recently, I have been conducting collaborative research on urban food environments in San Diego, CA, with projects such as young people's food practices and journeys in so-called food deserts, impacts of ethnic stores on food access, and connections between urban agriculture, farmers' markets, and restaurants and processes of displacement and gentrification in the city. My work often involves qualitative methods, including fieldwork and participatory methodologies. I have authored or co-authored over 50 refereed journal articles and book chapters, and I have co-edited three books: *Placing Latin America* (Rowman and Littlefield, 4 editions, last one in 2020), *Food and Place: A Critical Exploration* (Rowman and Littlefield, 2018) and *Young People, Border Spaces and Revolutionary Imaginations* (Routledge, 2011).

My research is deeply connected to my teaching, and I often emphasize the importance of community-based geographic research and critically engaged scholarship. I teach both undergraduate and graduate courses, including introductory courses on human geography, urban geography, regional courses on Latin America, and graduate courses and seminars on networks and relational thinking in human geography, place and the politics of memory, and gentrification, authenticity and consumption in the city.

For Vice President: Elena Givental, Lecturer at CSU East Bay & Berkeley City College

PhD (Geography), UC Davis

MBA, St. Mary's College of California

BS (Geography), Moscow Pedagogical University, Russia

My career trajectory in Geography has been non-linear from the start. I received a professional training as a geography educator in Russia. After graduating, I participated in geological research at Moscow State University doing fieldwork in the Ural Mountains. After immigrating to the United States in 1996, the necessity to establish myself in the new country caused a detour from my former career. My background in education helped me to find a job in a K-8 school where I eventually advanced to a business manager position. However, after completing my PhD in Geography at UC Davis, I shifted to a teaching career while pursuing research in the fields of historical, environmental, and resource geographies travelling to and publishing on the environmental issues in Russia, Vietnam, and Ethiopia. For the last fifteen years, I've been teaching a variety of Geography classes at Berkeley City College and CSU East Bay.

My first encounter with the APCG occurred at the 2007 annual meeting in Eugene (OR), and I've been faithful to this fine organization ever since, participating in almost all annual meetings, judging at the Student Paper/Poster Competition, being the Budget Committee member, and, since 2018, serving as the APCG Treasurer. I am honored to have been a part of the APCG Executive Council.

Geography plays an exclusive role in environmental awareness and education of younger generations. I view the APCG as an important avenue for creating a community of like-minded professionals and attracting young geographers and students in the related disciplines to share their knowledge and research interests. As APCG Vice President, I am planning to focus on expanding the APCG's community college outreach and building up membership as well as strengthening our cooperation with the AAG and other regional Geography organizations.

I would like to thank the APCG community for providing me with the opportunity to be an active participant and I look forward to continuing my association with the APCG

For Treasurer: Robert T. (Bob) Richardson, Professor Emeritus, CSU Sacramento

PhD (Geography), 1973, University of Oregon

MA (Geography), 1966, Louisiana State University

BS (Geography), 1964, University of Wisconsin

Five years ago, I stepped down as Treasurer, after twenty-one years on the job, and was appointed APCG's first Memory Counselor. I promised to work closely with Elena as she took over, which I have done. But she has decided that, rather than re-upping this time around, she would like to stand for Vice President. Knowing how it all works, and having no good excuses, I've agreed to step back into the role of Treasurer. Hey, I'm fully vaccinated and almost a year younger than Joe Biden. What could go wrong?

Post COVID, the APCG needs to build back up. I want to help where I can in the process.

Schultheis et al, continued from 7

etation structure which, in turn, influences biodiversity. Forest biomass has a significant impact on edaphic characteristics, hydrological properties, and fire regimes. Biomass governs the extent and rate of photosynthesis and controls the quantity of carbon released into the atmosphere when ecosystems are disturbed (Houghton et al., 2009). Above ground biomass is especially crucial to measure as it is in a constant state of flux because it is less chemically and physically protected than carbon stored below ground (Davidson & Janssens, 2006; Houghton et al., 2009). It is critical that we obtain thorough, accurate, and frequent measures of aboveground biomass in order to make sound policy decisions and better understand fluctuations to global atmospheric carbon levels.

The “gold standard” for measuring biomass density at a sample plot is an extremely labor intensive and destructive technique. The procedure involves cutting down, harvesting, drying and weighing all of the plant material for multiple trees across various geographies representative of a sample area. While this is the most accurate method to assess biomass, it is best reserved for small sample plots. The destructive nature, time, costs, and labor involved in this method render it unsuitable for use in larger scales. To counteract these issues, foresters and ecologists have established indirect methods for approximating biomass density. Most predominantly, they utilize empirically based allometric equations developed from the destructive samples. These allometric equations are statistical models correlating the actual biomass to certain tree biometrics that can be obtained non-destructively and fairly easily (Maulana et al., 2016). This indirect approach allows for the calculation of biomass density across a larger scale than the destructive sampling method. However, systematic sampling of aboveground biomass using allometric equations requires in-situ data collection of variables including DBH, height and tree species from “representative trees” in order to “calibrate” the allometric equations (Houghton et al., 2009) which is fairly labor intensive and excludes trees in inaccessible areas. Moreover, it is unknown how well these allometric equations hold up beyond the “calibration” zone (i.e. when the field data are extrapolated to larger regions), but the accuracy is

typically higher for less complex forest structures (Ketterings et al. 2001; Houghton et al., 2009).

Allometric equations can suffer bias introduced from the variables of the site where they were developed. When using allometric equations, caution should be exercised as topography, soil conditions, forest density, climate and hydrology are all variables that can vary from site to site and potentially affect allometry between tree biometrics, which will in turn affect the accuracy of allometric equations (Lu et al., 2014). In a perfect world, one would use site-specific (and species-specific) allometric equations developed from a large number of samples that were highly representative of the surrounding region. However, site-specific allometric equations are difficult to come by, and, more importantly, a major limitation with site-specific equations, inherent to the cost of destructive sampling of biomass, is that they are typically based on a small sample size (Ngomanda et al., 2014).

Remote sensing offers a way to close the gap in terms of scale. Remote sensing’s distinct features for data acquisition, coverage of large areas, and digital format place it as the leading data source for large-scale biomass estimation. Variables for modeling aboveground biomass can be acquired through optical multispectral or hyperspectral imagery, active sensor RADAR data and LiDAR data. With remote sensing, biomass is typically modeled through the use of textural information on the vegetation structure or vegetation indices that are correlated with biomass. Nevertheless, uncertainties in modeling aboveground biomass with remote sensing are high due to nuances in vegetation structure, landscape heterogeneity, seasonal variations, and inconsistent data availability, to name a few (Kumar & Mutanga, 2017). While much research has investigated the use of remote sensing in biomass modeling, procedures to choose fitting variables from remote sensing data and create accurate estimation models are still inadequately understood (Lu et al., 2014). Although remote sensing allows for large-scale biomass estimation, much more research is needed to improve our understanding of appropriate variables and methods for estimation.

Although LiDAR and DAP point clouds provide 3D data on vegetation structure, neither can truly acquire detailed information on dimensions under the canopy, such as diameter of the trunk. Therefore, remotely sensed data has traditionally not been suitable for use in biomass modeling with allometric equations which require the diameter of the trunk. Although,

a recent 2021 study by Jones et al. demonstrates the potential for remote sensing for use in allometric modeling. The goal of their research was to show proof-of-concept for the most precise estimate of above ground biomass in a mangrove forest utilizing variables obtained from UAV-imagery. Their research affirmed that diameter of the tree trunk is the best predictor of biomass, and other biometrics such as height and canopy area to have poor relationships with biomass. However, trunk diameter cannot be acquired from UAV imagery, so they ran regression models with remotely sensed canopy metrics and diameter and used these relationships to predict DBH; thereby, allowing them to predict aboveground biomass through the predicted DBH values. They found that dependence on second-order estimates of DBH increases uncertainty in subsequent estimates of biomass. One critical element of this study is that they had a very small sample size to work with ($n = 10$), lowering their ability to pin down the link between canopy area, tree height and diameter metrics (Jones et al., 2020). Nonetheless, their study illustrates the potential for employing UAV imagery to develop three-dimensional models of tree structure and

acquire biometric measurements to estimate above-ground biomass and carbon.

Preliminary Results

The objective of this preliminary research is to produce various estimates of AGB using sUAS imagery and varying levels of specificity. This research is testing the level of precision of these models (and potentially other contemporary remote sensing models) against the observed AGB of our sample dataset in order to ascertain their effectiveness in modeling AGB.

This study is a proof-of-concept that UAS imagery can be used to model AGB in an easy-to-deploy, inexpensive, and efficient procedure compared to other remote sensing or field approaches. While aerial remote sensing cannot extract diameter metrics which are the best predictor of AGB, it can extract other variables with high accuracy that can be used to model DBH. The use of second-order predictions of trunk diameter does unfortunately lead to subsequent un-

Continued on p. 20

FALL 2023 APCG MEETING IN VENTURA CALIFORNIA - OCT. 19-21.

More details to
come!



ELENA GIVENTAL

TREASURER'S REPORT

The Treasurer's Report for the FY July 2021-June 2022 was distributed at the APCG Business Meeting in Bellingham WA on October 8, 2022. The Report did not reflect the revenue and expenses incurred at the 84th APCG Annual Meeting in Bellingham, which will be discussed separately.

Page 1 of the Treasurer's Report summarized the APCG receipts and disbursements over the 2021/22 fiscal year, from July 1, 2021, through June 30, 2022. The 2021/22 FY ended with a net revenue of \$11,566. The APCG membership dues contributed \$8,387 while the major source of income in 2021/22 FY (similarly to 2020-2021 fiscal year) came from the royalties from the multiple volumes of the APCG Yearbook received from the Project Muse through the University of Hawaii Press (\$11,191). The AAG annual regional allocation, as well as general and special contributions constituted a significant portion of the APCG revenues. We express our gratitude to the APCG member and non-member donors, and to the AAG for their fiscal and administrative support.

The APCG expenses in the 2021/22 fiscal year were the combination of the 2021 San Diego meeting student grants and awards, the fees paid to the Wild Apricot Data Management site, and the Yearbook

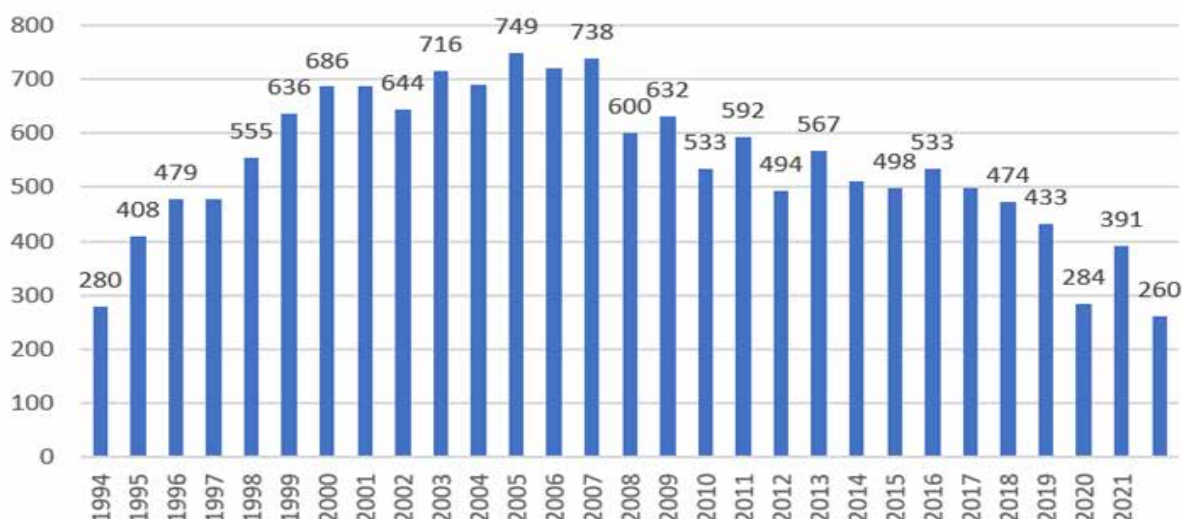
Volumes 83 and 84 production fees. It is important to note, however, that after the end of the fiscal year there were significant modifications to the expenditure lines. We received the AAG grant that fully covered the cost of the Wild Apricot database, and retroactively paid additional expenses incurred for the Yearbook v. 83 and 84 production (the total of \$8,983), so the updated net revenue in 2021/22 FY is \$5,045.

Page 1 of the Report also showed the historical data on the APCG membership since 1994, maintained by our Memory Councilor and Past Treasurer Bob Richardson. The APCG membership has been declining, from 749 members in 2005 to 284 in 2020, with a slight uptick to 391 members in 2021. The preliminary membership numbers for 2022 still need to be verified and updated. Below is the graph showing the APCG membership trends.

Page 2 of the Report illustrated the donations and disbursements in the Special Funds since July 1, 2021. As of June 30, 2022, the total amount in the Special Funds was \$126,236 (compared to \$127,171 in the previous FY).

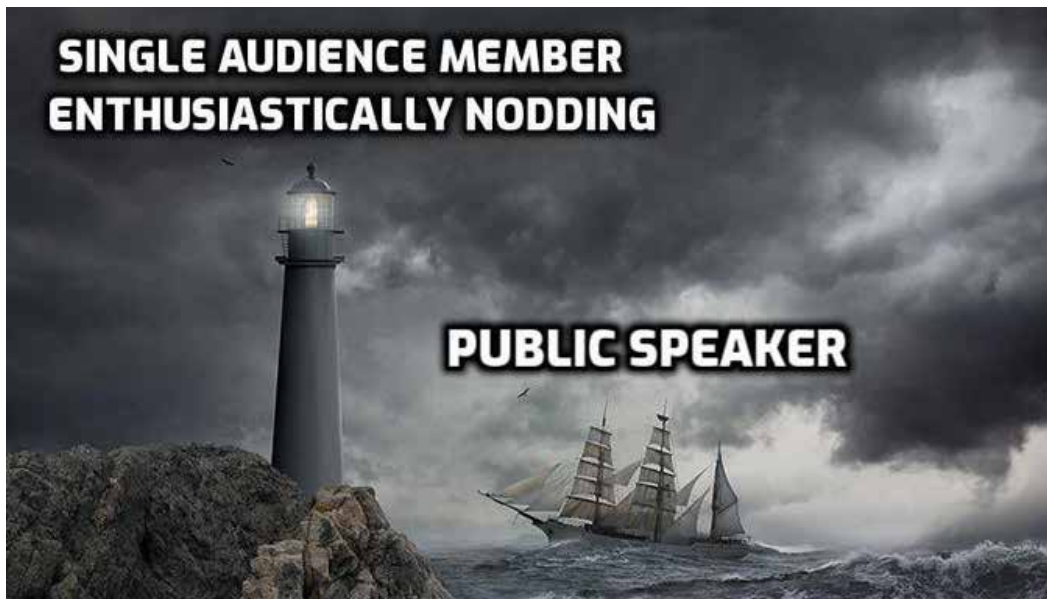
The 84th APCG Annual Meeting was hosted by the Environmental Studies Department of Western

APCG Membership 1994-2022



Washington University in Bellingham, WA, and held on the WWU campus on October 6-8, 2022. The total of 106 registrants participated in both in-person and virtual sessions. The meeting participant number was significantly down from the San Diego 2021 meeting with 151 participants and the Flagstaff 2019 meeting with 161 participants. The in-person participation, however, was similar to that in the previous year (83 participants) while the online participation decreased from 45% to 22% of the participants compared to 2021.

Returning to the traditional pre-pandemic APCG meeting format, the meeting featured three field trips, the Opening and Keynote Lecture Receptions, the Women's Network and Graduate Student Luncheons, and the Awards Banquet. The total of 45 papers and over 15 posters were presented. The Student Paper/Poster Competition Committee disbursed 18 travel grants in the amount of \$4,400 and 10 awards at the Baccalaureate, Master's and PhD levels, in the amount of \$2,400. Several Special Funds awarded \$3,900 in travel grants and scholarships to 13 students. The Special Funds included the Women's Network (\$1,200), Latina/o American Travel Scholarship (\$600), Ford-Arreola Fieldwork-Archival Scholarship (\$1,500), and African Descent Student Travel Scholarship (\$600). The meeting inaugurated two new research awards, \$500 each, available to all early career and non-tenured faculty.



PRESIDENT'S COLUMN (CONT. FROM P.5)

As always, we're looking for volunteers for hosting upcoming annual meetings of the APCG. Please reach out if you might be interested. I also ask you to reach out if you want to begin the conversation about additional alternatives and out of the box solutions we can consider to support both our humanitarian values as an organization while also supporting our colleagues. My inbox is always open at kbezdec@calstatela.edu.

Until then, I'll continue working with you and for you to create a more equitable sociopolitical landscape, one in which there are no excuses for travel bans because our policies do not treat people as things or as Other than. One in which the lyrics of "Wherever I May Roam" can once again apply to APCG as it travels far and wide across our regional space from annual meeting to annual meeting.

DYDIA DELYSER

REGIONAL COUNCILOR REPORT

Submitted April 2023

Coming out of the pandemic and back to in-person and hybrid meetings, the AAG has been very busy. This report covers the September 2022 Council meeting (the report for which was inadvertently not yet published) as well as the November 2022 and March 2023 Council meetings. Items are bulletted for convenience. Please feel free to reach out to me for more information or with any questions and comments.

Move to new offices

Sale of Meridian Place is in progress; move to the new office (LEED Gold certified) is complete. Staff who commute using public transportation are reimbursed for those costs.

Climate Forward initiative and 3 nodes

As part of the AAG's Climate Forward Initiative 3 universities, including in the APCG Cal State Fullerton, experimented with local "nodes" that streamed the conference. At CSUF more than 50 registrants over 3 days were able to watch all streamed content and enjoy meals and coffee together. This was a good recruiting event for the Department of Geography & the Environment, and it exposed new people to the AAG. The aims in

future include using these nodes to help reduce carbon footprint of the annual meeting by allowing members to travel shorter distances.

Denver Hybrid meeting.

This year the AAG annual meeting was hybrid for the first time. The goal of 10% hybrid sessions was exceeded, with 16% of content, or more than 200 sessions fully hybrid (with both online and in-person presenters). Over 5700 people from 82 countries were registered for the meeting (either in person or online).

Updated bylaws.

AAG recently updated its bylaws; the new ones were presented at the Business Meeting at the conference. The chief changes involve streamlining so that many mundane and ordinary items of business will no longer require a vote of the entire membership.

Finances.

Market performance has not been great, and AAG's expenses (including increased expenses incurred by the hybrid meeting) have grown. Annual-meeting attendance is expected to remain lower than it was at its peak in the 2010s. AAG is tightening its budget and seeking to rightsize staff and programs., while continuing to deliver world-class members services

and programing. The proposed budget puts the Association on sustainable footing.

Investment divestment.

The AAG has now moved its entire investment portfolio out of fossil fuels and into socially and environmentally just funds (ESG Funds) as determined by Council.

Hawai'i meeting and Indigenous groups.

AAG leadership is in close contact with multiple Kanaka (Indigenous Hawai'ian) groups to ensure that we will be welcomed for the 2024 annual meeting in Honolulu and that the meeting meets their needs. Stay tuned for more details and don't hesitate to ask if you have concerns.

Online offerings.

The AAG's portfolio of online offerings expanded significantly in the pandemic: the combined offerings of all the webinars, seminars, and workshops reached as many people as the annual meeting did. Staff are now assessing the programs. Look for 2023 offerings in the new year.

Guide to Programs.

The new, online version of the



APCG'S BUSINESS MEETING MINUTES FROM BELLINGHAM, WA, FALL 2022

Terence Young

Steve Graves opened the meeting in Academic West 205 at Western Washington University at 5:06 PM on Saturday, October 8, 2022, with 15 people present (15 in person; 0 online).

Minutes from the Fall 2021 APCG Business Meeting in San Diego, CA were unanimously approved.

Election Results: Steve Graves presented the results.

Kris Bezdecny – President

Fernando Bosco – Vice-President

Terence Young – Secretary

Dydia Delyser – AAG Councilor

Continuing:

Elena Givental – Treasurer

Steve Graves – Past President

REPORTS

Treasurer's Report: Elena Givental gave her report, which will be published in *Pacifica*. Her Treasurer's Report was distributed (five pages total, including endnotes). The first page summarized transactions over the past fiscal year (July 1, 2021 – June 30, 2022) and membership numbers since 1994. Pages two to three detail APCG special funds, and pages four to five are a "snapshot" of APCG finances for the past 31 years. From the budget overview on page one of the report, receipts exceeded disbursement, increasing the total funds in APCG's regular accounts (not special funds) by approximately \$11,600 during the year. Elena explained the numbers, including the recently arrived deficit from the 2021 meeting. The Yearbook numbers are always slow so past years sometimes must be included in the present accounting. Overall, our general funds we are in very solid shape, she reported. Balances are good. The special funds sheets show contributions and interest earned. She noted that Bob Richardson compiled the "snapshot" spreadsheet of APCG finances but notes that it doesn't include special funds.

Membership trend is not positive. The overall num-

bers have been sliding downward. At peak we had over 600 members. Now somewhere nearer to 300 but end of year numbers should be over 300.

Chris Lukinbeal inquired about the status of the Harry and Shirley Bailey Award since the total is smaller than most special funds. What's happening? Elena explained that we need to pay greater attention to individual funds, which can show low balances. Simply put, the answer is that no donations have been received. Bob Richardson reported that the children had not donated any additional funds lately. Steve G. said that some funds are old and hard to obtain new donations to them. He said we may move some general funds into some special funds.

Report Approved and "with Gratitude" as initially motioned by Alec Murphy.

AAG Councilor Report: Dydia Delyser presented the Councilor's report, which will be published in *Pacifica*. She only became our region's councilor in July, but she can report that the AAG is dynamic and growing in very positive directions. Much is going well. The association is moving out of its Meridian Place offices. The pandemic produced many opportunities for office-oriented businesses in the Washington, DC area. The association obtained a 12-year lease for 10 years' price on a place across the street from the White House. Its space is flexible, which is an important accommodation with most people still working remotely. Not everyone will continue to do so, but some will remain remote workers. The new building is ADA compliant, which is a solid step forward. The plan is to sell the Meridian Place building.

The new, draft strategic plan at the AAG is forward-looking and positive. She will share when it is adopted. It emphasizes who we are, who the association is for, and what can the AAG do for members. For example, how can we be better known. That is,

the plan is to be more member oriented. More on-line programming is planned. The growth of on-line programs has been huge, solid, and a challenge for staff. Alec Murphy noted that AAG must have lost money during the pandemic, yes? Yes, reported Dydia, but the organization was in solid shape before Covid and remains in good fiscal condition.

Bob Richardson brought up the subject that the APCG is an independent organization with a separate path to membership. We will need help to continue this condition and to integrate AAG and APCG memberships. Dydia said we will remain good. AAG recognizes the need to connect with regional associations and they assigned Emily Fekete the task. Emily reported that her position was created a year ago. She described the sort of actions she has taken and can take to assist us. If, for example, one is the chair of a Specialty Group with a question, she's the contact person.

Yearbook Editor's Report: Mike Pretes reported for Craig Revels. This year's *Yearbook* is doing well and coming soon. He called for manuscript submissions going forward. Although Craig's five-year term as editor is complete this year, he volunteered to continue as editor.

Pacifica Editor's Report: Steve Graves reported for Mike Pesses. Mike suggests (and Steve agrees) we transform the newsletter function of *Pacifica* into an on-line announcement service distributed through the APCG discussion list. It would not necessarily have to be daily, but could be accumulated and distributed periodically (e.g., weekly) if a member wished to opt for it. The featured articles would continue to appear on publication dates. This sort of an arrangement would not slow down the arrival of time-sensitive announcements.

This suggestion prompted a discussion of social media. According to Denielle Perry, a show of hands concerning the use of social media was held at the Women's Network Lunch. It appears that LinkedIn is the best venue for all members since nearly everyone has an account. Steve reported that he has a LinkedIn page himself. Watch for a future APCG site or group on LinkedIn.

It was noted that *Pacifica* used to appear soon after the fall meeting. Steve noted that it's been challenging to do so, especially in recent years, and that the newsletter editorship changed recently. Mike Pretes also noted

that the new software is more difficult to use than the older one. If anyone has any ideas concerning *Pacifica*, please share them with Steve Graves, Kris Bezdecny, Fernando Bosco, or Mike Pesses.

Committee Reports:

APCG Women's Network – Denielle Perry reported. She's co-chair with Elena Rader. Gave 6 awards – 1 Ph.D. student and 5 Master's students. The network agreed to become an on-going interaction rather than just a once per year connection at the annual meeting. They want to build a presence that provides services (e.g., shared housing board for meetings) and set up a mentoring network too. Bob Richardson said the network can ask him to help with general announcement and efforts to solicit contributions. Denielle said the network will work on developing an announcement mechanism soliciting contributions on LinkedIn. Steve G. says we will work to improve mechanisms for contributions.

Future Meeting Sites – Mike Pretes reported. The association needs volunteers to host and/or support future meetings. It seems that the 2023 meeting will occur in CSU-East Bay. Other Bay Area universities expressed a willingness to support the effort. The site for the 2024 meeting is open. Any volunteers? It was suggested that we should have plans for three-years running.

California Geographical Society – Steve Graves reported. The next meeting will be in spring in Boyle Heights/East L.A.. The plans for this upcoming meeting are "cool" and moving forward well. He suggested that APCG could be a liaison between AAG and CGS.

Awards – Kris Bezdecny reported. She will reach out this fall to the people handling the award committees. She's also hoping to reestablish committees and, especially, a point person/chair for each one. For some awards, students did not apply. For others, students wanted to apply, but there was no one to respond to inquiry. We need to work to have our meeting attendance better represent the Association's membership. Alec Murphy stated that two students at U of Oregon applied for the African Descent Award but received no response. Steve G. and Kris promised to investigate (update: these students were awarded funds at the Banquet Dinner).



Volume 84 of the Yearbook of the APCG is out and available!

Members will receive a hard copy in the mail, but digital versions of this and past issues are available through [Project Muse](#).

It's also never too early to think about publishing a research article or essay in the next issue. Contact editor [Craig Revels](#) for more information.

Call for Content!

Pacifica needs your submissions! This is a great showcase for research notes, essays and interventions in geography, and photos of our conferences, you doing geography stuff, or anything else you feel like sharing with the community.

This is also a wonderful venue for students to get early stages of their work out to the discipline.

Send inquiries and material to [Mike Pesses](#).

REGIONAL COUNCILOR REPORT (CONT. FROM 14)

Guide to Programs in Geography is available on the AAG's website. Importantly, it is now free to register programs and so more equitable for smaller departments and in particular community-college programs. Watch for requests to submit your program by the end of the year. Follow this link: <https://www.aag.org/guide-to-geography-programs-opportunities/>.

AAG strategic plan.

The new 2023-2025 AAG strategic plan (approved by Council) was launched at the Denver meeting. More information is here: <https://www.aag.org/about-us/>.

JEDI.

Dr Risha Berry, AAG's new Director of Diversity, Equity, and Inclusion has joined the staff and was at the Annual Meeting. Find out more here: <https://www.aag.org/program/aag-touchpoints/>.

New Public-and-Engaged Scholarship (PES) Taskforce

The PES Taskforce was convened by AAG Vice President Rebecca Lave. Pacific Coast Regional Councilor DeLyser has volunteered to serve. The remit includes gathering data about the breadth of such activities among members, and making recommendations for how the AAG can support members and departments in this kind of scholarship. Look for updates over the 3-year span of the taskforce.

Whitepaper on GeoEthics and locational information coming soon.

AAG convened a summit on GeoEthics, locational information and the public interest. Participants together have drafted a Whitepaper resulting from their discussions. Find out more here: <https://>

www.aag.org/locational-information-quick-start-guide/.

Elevate the Discipline.

A new program, Elevate the Discipline, was launched at the Denver meetings. Everyone can participate, and anyone can apply to be part of the first "cohort" of geographers who will gain skills helping them link their scholarly work on the first approved theme of "Climate Change and Society" to media and policy. More information and a link to apply to join the first cohort (with a 5 May deadline) is here: <https://www.aag.org/program/elevate-the-discipline/>.

IN MEMORIUM

William "Bill" Koelsch

Bill joined the APCG in February, 1999, after retiring from Clark and moving to San Diego. He attended many meetings and presented at most of them, until declining health made travel difficult. The Portland meeting in 2016 was his last. A year or two later he quit using a computer, reverting to an old typewriter badly in need of a new ribbon. This also meant he no longer could see new online editions of *Pacifica*, which frustrated him. He traveled by train when possible, including to the Tahoe meeting (2013), arranging for me to pick him up at the station in Truckee, and return him a few days later, affording us two good long chats. For many years he donated \$500 annually to the Latina/o American Travel Scholarship fund. His scholarship was impeccable and his membership in the APCG was a model for us all aspire to.

-Bob Richardson

APCG DIRECTORY

Executive Council

President

Kris Bezdecny
Cal State Los Angeles
kbezdec@calstatela.edu

Vice President

Fernando Bosco
San Diego State University
fbosco@sdsu.edu

Treasurer

Elena Givental
Cal State East Bay
elena.givental@csueastbay.edu

Secretary

Terry Young
Cal Poly Pomona
tgyoung@cpp.edu

AAG Councilor

Dydia DeLyser
CSU Fullerton
dydia@fullerton.edu

Past President

Steve Graves
CSUN
steve.graves@csun.edu

APCG Committees

Awards

- Stuart Aitken, San Diego State University, saitken@sdsu.edu
- Lorne Platt, Cal Poly, Pomona, laplatt@cpp.edu
- Ryan Miller, Chico State, rgmiller@csuchico.edu
- Elena Givental, Cal State East Bay, elena.givental@csueasybay.edu

Nominations

- Denielle Perry, Northern Arizona University, denielle.perry@nau.edu

Distinguished Service Award

- Kate Berry (Chair), University of Nevada, Reno, kberry@unr.edu

- Daniel Arreola, Arizona State University, daniel.arreola@asu.edu
- Yolonda Youngs, CSU, San Bernardino, yyoungs@csusb.edu

Applied and Independent Geographers Group

- Vacant

APCG Archivist

- Michael Pretes, University of North Alabama, mjpretres@una.edu

Membership

- Paul Starrs, University of Nevada, Reno, starrs@unr.edu
- Sriram Khé, Western Oregon University, khes@wou.edu

Budget

- Terence Young, Cal Poly Pomona, tjyoung@cpp.edu
- Monika Calef, Soka University of America, mcalef@soka.edu

Margaret Trussell Scholarship

- Peggy Hauselt (Chair), CSU, Stanislaus, phauselt@csustan.edu
- Monika Calef, Soka University of America, mcalef@soka.edu
- Jim Keese, Cal Poly San Luis Obispo, jkeese@calpoly.edu

Women's Network

- Lily House-Peters (co-chair), CSU Long Beach, lily.housepeters@csulb.edu
- Katherine Sammler (co-chair), Helmholtz Institute for Functional Marine Biology, katherine.sammler@hifmb.de

Larry Ford Fieldwork Scholarship

- Paul Starrs (chair), University of Nevada, Reno, starrs@unr.edu
- Michael Schmandt, Sacramento State, schmandt@saclink.csus.edu
- Dydia DeLyser, CSU Fullerton, dydia@fullerton.edu

Latina/o American Travel Scholarship

- Dan Arreola (Chair), Arizona State University, deniel.arreola@asu.edu

- Catalina Llanos, Cal Fire and UC Davis, catalinallanos7@gmail.com
- Maria Fadiman, Florida Atlantic University, mfadiman@fau.edu

Indigenous Student Travel Scholarship

- Kate Berry (Chair), University of Nevada, Reno, kberry@unr.edu
- Kenneth Madsen, The Ohio State University, madsen.34@osu.edu
- HoMana Pawiki, Northern Arizona University, hpawiki@earthlink.net

African Descent Student Travel Scholarship

- Carol Sawyer (Chair), University of South Alabama, sawyer@southalabama.edu
- Nancee Hunter, Portland State University, nhunter@pdx.edu
- Lorne Platt, Cal Poly Pomona, laplatt@cpp.edu

Webmaster

- Jim Keese, Cal Poly San Luis Obispo, jkeese@calpoly.edu

Geography Bowl

- Tina White, Coach, CSUN, tina.m.white@csun.edu

Memory Counselor

- Bob Richardson, Sacramento State, rtalbot@csus.edu

Publications

Yearbook

- Craig Revels (Editor), Central Washington University, Craig, Revels@cwu.edu

Pacifica

- Mike Pesses (Editor), Antelope Valley College, mpesses@avc.edu

Schultheis et al, continued from 11

certainty in our predictions of AGB. Nonetheless, when we tested our model and a generalized global equation for calculating AGB against our observed AGB for our sample, our model outperformed the global equation yielding a 10% margin of error compared to an 800% margin of error, respectively. UAS image-derived estimates can be made far more efficiently (in labor, time, and cost) when compared to contemporary approaches, and with further refinement of the model, UAS can prove to be a powerful tool for AGB and carbon content estimation.

References

- Cairns, Michael A., Sandra Brown, Eileen H. Helmer, and Greg A. Baumgardner. 1997. "Root Biomass Allocation in the World's Upland Forests." *Oecologia* 111 (1): 1–11.
- Davidson, Eric and Janssen, Ivan. 2006. "Temperature sensitivity of soil carbon Decomposition and feedbacks to climate change." *Nature*.
- Houghton, R. A., Forrest Hall, and Scott J. Goetz. 2009. "Importance of Biomass in the Global Carbon Cycle." *Journal of Geophysical Research* 114 (G2). <https://doi.org/10.1029/2009jg000935>.
- Jones, Alice R., Ramesh Raja Segaran, Kenneth D. Clarke, Michelle Waycott, William S. H. Goh, and Bronwyn M. Gillanders. 2020. "Estimating Mangrove Tree Biomass and Carbon Content: A Comparison of Forest Inventory Techniques and Drone Imagery." *Frontiers in Marine Science* 6. <https://doi.org/10.3389/fmars.2019.00784>.
- Ketterings, Quirine M., Richard Coe, Meine van Noordwijk, Yakub Ambagau', and Cheryl A. Palm. 2001. "Reducing Uncertainty in the Use of Allometric Biomass Equations for Predicting above-Ground Tree Biomass in Mixed Secondary Forests." *Forest Ecology and Management* 146 (1): 199–209.
- Kumar, Lalit, and Onesimo Mutanga. 2017. "Remote Sensing of Above-Ground Biomass." *Remote Sensing* 9 (9): 935.
- Lu, Dengsheng, Qi Chen, Guangxing Wang, Lijuan Liu, Guiying Li, and Emilio Moran. 2016. "A Survey of Remote Sensing-Based Aboveground Biomass Estimation Methods in Forest Ecosystems." *International Journal of Digital Earth* 9 (1): 63–105.
- Maulana, Sandhi I., Yohannes Wibisono, and Singgih Utomo. 2016. "Development of Local Allometric Equation to Estimate Total Aboveground Biomass in Papua Tropical Forest." *Indonesian Journal of Forestry Research* 3 (2): 107–18.
- Ngomanda, Alfred, Nestor Laurier Engone Obiang, Judicaël Lebamba, Quentin Moundounga Mavouroulou, Hugues Gomat, Géraud Sidoine Mankou, Joël Loumeto, et al. 2014. "Site-Specific versus Pantropical Allometric Equations: Which Option to Estimate the Biomass of a Moist Central African Forest?" *Forest Ecology and Management* 312 (January): 1–9.

Business Meeting Minutes, continued from 17

There have also been similar problems with other committees (e.g., Indigenous Student Travel Scholarship). Denielle Perry explained that Indigenous students need to be specifically encouraged to apply. In response to the general concern, Dydia Delyser offered an enlightening suggestion concerning the Larry Ford Fieldwork Scholarship. She says that a late call for applications (e.g., posted on APCG webpage) was effective, but earlier outreach efforts didn't generate much response. She thinks the pandemic has impacted some applicants and that some applicants are resistant to emails. It was agreed that the timing of the call for applications is critical. Steve G suggested that after we have AAG's management of our memberships settled, we can include check boxes where applicants can ask to be considered for awards. Denielle Perry suggested that whenever we send an email concerning awards, all awards and amounts available should be listed. Aquila Flower recommended that, where possible, payment of awards should occur before a meeting. This information should be included in any award announcements. Students are more likely to apply for awards and attend the conference if they know they could be sent funds in advance.

Treasurer Nominations – Steve Graves reported. We need to “beat the bushes” (lightly) until Elena, who has served the Association well, decides whether she will continue as treasurer and organizer for the 2023 meeting. We need two candidates. In addition, the Executive Council is interested in moving the association's bank account. Waiting to see what happens with the treasurer. Steve would like to see us work with a socially and environmentally aware institution.

Geography Bowl – Tina White reported. Excellent turnout! She will gladly accept help. Otherwise all is going well.

K-12 Committee – Steve Graves reported. Nothing happened this past year.

2023 Collaboration with AAG – Steve Graves reported. Some glitches this year, but we are the “guinea pigs” because our meeting came first. He thinks things will be smoother next time. AAG can handle our registration.

From the Floor – Huzzahs! and words of appreciation were extended to the conference organizers, especially Aquila Flower, the conference student volunteers, and the staff at the AAG and WWU who helped to make the conference work very well.

Executive Council Meeting – The Executive Council met on the Western Washington University campus on Saturday, October 8, 2022, from 7:30 AM to 9:00 AM in Room 205, Academic West Building.

Business Meeting adjourned at 6:03 PM.

DONATE TODAY!



Use the above QR Code to easily access our donations page.

While our dues help keep this organization going, your donations to either our general fund or one of specific scholarships or grants help tremendously. To make this a relatively painless process, you can either click on this [link](#) to visit our webpage or point your phone's camera at the above QR code to get to the same place.

And as if helping students wasn't enough of an incentive, the APCG is a 501(c)(3) non-profit so your donation is eligible as a charitable deduction. You can't afford not to donate!

In addition to the general fund, we would greatly appreciate donations to the following scholarships and/or grants:

- Women's Network Travel Grants
- Larry Ford Fieldwork Scholarship in Cultural Geography
- Latina/o American Student Travel Scholarships
- Indigenous Student Travel Scholarships
- African Descent Student Travel Scholarships
- Margaret Trussell Memorial Fund
- Eugene Hoerauf Scholarship

NEW APCG MEMBERS

We welcome our new members over the past two years (*asterisk denotes a former member who has rejoined).

2022

Cy Abbott	Susan Manzi
Kaitlyn Alvarez Noli	Dominic Merkle
Emily Arcos	Abby Mocharnuk
Clara Atwell	Gary Molyneaux
Lucas Belury	Holly Moulton
Troy Brundidge	Jolene Murphy
Patrick Buckley*	Jennifer O'Brien
Jacqueline Bui	Rebekah Paci-Green
Anujin Byambajav	Michelle Palma
Sadie Calhoun	Steven Pedroza
Olivia Cameron	Alana Rader
Margo Carroll	Marilyn Raphael
Alice Cocke	Alondra Rodriguez
Kristen Conway-Gomez	Noriega
Lamai Cox	Francesca Rodriguez-Hart
Jillian Deneault	Matthew Rosson
Arlo Dolven	Jake Rowlett
Jillian Farley	Jim Safranek
Jessica Froese	Kailey Schilling-Brokaw
Natalie Furness	Brendan Schultheis
Aaron Groth	Darren Sears
Ashley Guerrero	Christine Seeger
Jose Guzman	Deondre Smiles
Olivia Hobson	Insang Song
Chevon Holmes	Elisa Sperandio
Haven Johansen	Micayla Spittler
Gabriel Judkins*	Jamie Stclair
Sydney Katz	Christopher Swindell
Micah Kruser	Jessica Tean
Sue LaDochy	Frida Timan
Clara Lemme Ribeiro	Eliyah Valencia
Cyan LeMoal	Ian Walker
Brandon Lentz	Andrew Wallace
Shelby Maag	Dr. Robert Williams
Alyson Mabie	

Continued p. 24

MEMBERSHIP

The Association of Pacific Coast Geographers is an independent organization as well as a regional division of the American Association of Geographers. APCG member dues are: Regular \$25; Student or Retired \$15 Contributing \$30 or more (any contribution over \$25 is tax deductible). A second (Joint) member may be added to any of these categories for another \$3. Second (Joint) members receive a ballot but not another copy of the *Yearbook*. Dues are paid for the calendar year. Unless indicated otherwise, checks dated before November 1 will be credited to the current year, while those dated after November 1 will be credited to the next year. Only current year members receive the *Yearbook*. Current members will be sent a membership renewal notice near the end of the calendar year. Questions about membership may be directed to Elena Givental, elena.givental@csueastbay.edu.

2022 APCG STUDENT PAPER & POSTER AWARDEES IN BELLINGHAM, WA

APCG President's PhD Paper Award

Frida Timan, London School of Economics
Making Enjoyment: Public space permits, policing of the unhoused, and the political lives of 'maintenance' in San Francisco's parklets

APCG President's Masters Paper Award

Olivia Cameron, Oregon State University
Social Identity and Agricultural Decision Making

APCG President's Bachelors Paper Award

Jessica Froese, University of Northern British Columbia
An upstream battle: The political ecology of Pacific salmon management in Canada

Poster Award, BA

Jacqueline Bui, CSU Fullerton
Remotely Accurate? Estimating Above Ground Biomass with Remote Sensing

Poster Award, MA

Angeli Richard, CSU San Bernardino
Tracing the Impact of Climate Change through Refugee Camps and Migration

Poster Award, MA

Sydney Katz, University of Oregon
Mapping Soil Organic Carbon in Wildfire-Affected Areas of the McKenzie River Landscape, Oregon, USA

Tom McKnight & Joan Clemons Award for an Outstanding Paper

Daniel Grafton, UCSB/San Diego State
Sustainable Tourism and Global Climate Change in Polar Regions: Women's Voices and Agency

Geosystems Award, BA

Clara Atwell and Sadie Calhoun, Cal Poly SLO
Modeling Forest Transition Using Deep Learning: A Remote Sensing Study of Taucamarca, Peru

Geosystems Award, MA

Andrew Wallace, CSU Fullerton
Assessing Organizational Challenges within Municipal GIS Implementations: A Case Study of Urban Drainage System Asset Management in Orange County, California

Ford-Arreola Fieldwork-Archival Research Scholarship

Francesca Rodriguez-Hart, University of Nevada, Reno
Jake Rowlett, San Diego State

Non Tenure Track Research Award

Tiana Fain, Southern California
Desert Space, Place, & Art: Site-Specific Art Installations in California Desert Communities

Janice Monk Early Career Award

Sophia Borgias, Boise State University
Beyond Injustice: Diverse Visions and Coalitions for Water Justice in Rural-Urban Water Conflicts

TRAVEL GRANTS

- Alondra Rodriguez Noriega, CSUN
- Andrew Wallace, CSU Fullerton
- Angeli Richard, CSU San Bernardino
- Benjamin Weinger, UCLA
- Chevon Holmes, UC Davis
- Cy Abbot, University of Oregon
- Troy Brundidge, University of Oregon
- Cyan LeMoal, University of Northern British Columbia
- Holly Moulton, University of Oregon
- Insang Song, University of Oregon
- Jacqueline Bui, CSU Fullerton
- Jake Rowlett, San Diego State
- Jamie StClair, CSU Fullerton
- Jessica Froese, University of Northern British Columbia
- Kailey Schillinger-Brokaw, Western Washington University
- Kangsan Lee, University of Arizona
- Natalie Furness, Western Washington University
- Olivia Hobson, Western Washington University
- Steven Pedroza, CSU Fullerton
- Sydney Katz, University of Oregon
- Allison Pary, CSU Dominguez Hills
- Alondra Rodriguez Noriega, CSUN
- Angeli Richard, CSU San Bernardino
- Holly Moulton, University of Oregon
- Lamai Cox, Western Washington University
- Zihui Lei, CSU Northridge
- Warren Bristol, University of Arizona

APCG Distinguished Service Award (Faculty)

Congratulations to Professor Emeritus Stephen Cunha (Cal Poly Humboldt) for the 2022 Distinguished Service Award!



SPECIAL THANKS!

Bill and Kathy Bowen donated \$550 to fund Awards Banquet tickets at the Bellingham meeting for all student first-presenters, something Bill and Marilyn began doing at the San Diego meeting in 2009, greatly increasing student numbers and making the event much more fun for everyone.

Robert and Bobbé Christopherson gave \$1000 to fund two Geosystems awards at the Bellingham meeting, as they have been doing every year starting with the 2012 meeting in Olympia.

NEW MEMBERS! (CONT. FROM 22)

Aviva Wolf-Jacobs
Katya Yanez
Elizabeth Zimmerman

2021

Jad Aljersh
Thomas Baerwald
Matthew Balentine
Josefina Barcia
Kenya Becerra
Clare Beer
Alejandro Beltran Cortez
Maxwell Blaine
Susan Brackett
Desiree Braziel
Adam Bringham
Warren Bristol
Charlie Burling
Cameron Calverley
Cindy Chen
Parveen Chhetri
Benjamin Christian*
Rachel Cunningham*
William Curtiss
M. DeVivo
Collins Eke*
Kelsey Emard
Jessica Embury
Christopher Espino
Tina Fernandez
Francisco Gallegos
Rebecca Galvan
Danielle Gerger

Maritza Geronimo
Kayla Gorman
Dan Grafton
Gwenyth Greco
Catherine Green
Cassie Hansen*
Mallory Harris
William Helmer
Daniel Helton
Billy Henshaw
Ihovanna Huezo
Sharon Jacob
Juan Carlos Jimenez-Cruz
Hilary Johnson
Christine Johnson
Tara Jones
Jason Jurjevich
Michelle Kinzel
Christopher Kracha
Anthony Labrador
Flavia Maria Lake
Gary Langham
Zihui Lei
Kelly Leon
Meredith Leonard
Paul Lewis
Jessica Lindsay
Kassandra Lisenbee
Anahi Mendez Lozano
Roger McClish
Melanie Mejia
Fabian Montoya
Gabriela Morales

Edson Morales Sanchez
Cody Mower
Alyssa Nelson
William Nicewonger
Petra Nichols
Richard Nostrand
Leyna Olivares
Jennifer Palmer
Asha Paudel
Alex (Adriana) Perez
Fernanda Portillo
Karen Ramirez
Birendra Rana*
Waverly Ray
David Reis
Anna Reyes
Angeli Richard
Wauren Richardson
Pam Rittelmeyer
Meg Roland
Sam Roodbar
Nicholas Rose
Rachel Russell
Antonio Santana
Aydan Scott
Al Shoyeb
Brisa Smith
Vy Tran
Maria Venegas
Benjamin Weinger

CONTRIBUTING MEMBERS

Many thanks to the following Contributing members (38 of whom have renewed for 2023, plus 11 from 2022 who have yet to renew). The extra they have paid for their membership (\$1,460 more than if Regular members, and many of them could be Student or Retired members) helps to pay for the President's Awards and regular travel grants for student presenters. Of the 119 members who have already renewed or joined for 2023 as of April 25, 2023, 19% are Contributing Members.

Daniel D. Arreola
 M. Dolores Bayle
 Gregory S. Bohr
 Ronaldo I. Caluza
 David L. Carlson
 Robert W. Christopherson
 Richard Cocke
 Kristen Conway-Gomez
 William K. Crowley
 Robin Dattel
 Vincent Del Casino, Jr.
 Dennis J. Dingemans
 Vanessa Engstrom
 Tracey Ferguson
 Richard Francaviglia
 Kathryn (Katie) Gerber
 Bonnie Guyer
 Cassie Hansen
 Leslie Hassett
 Gary Hytrek
 John Paul Jones, III
 James R. Keese
 Thomas Krabacher
 James S. Kus
 Sheryl Luzzadder-Beach

Peter F. Mason
 Alexander B. Murphy
 Lise Nelson
 Doug R. Oetter
 Michael Pesses
 David A. Plane
 Lorne Platt
 Michael Pretes
 Craig S. Revels
 Robert T. Richardson
 Katherine Sammler
 Michael Schmandt
 William Selby
 Rosemary Sherriff
 Betty Elaine Smith
 Maureen Smith
 Julie Stoughton
 Michael Strong
 Nancy Summers
 Carlos Tovares
 James (Jim) Wickes
 Siri Nimal Wickramaratne
 Nancy Lee Wilkinson
 Terence Young

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Pacifica: The Newsletter of the APCG

