

Newsletter #96 Spring 2019



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Owens Valley looking south from Highway 168.

President's Letter

David Neidorf

For his final project in Laura Nelson's class, Reimagining Education, Asa Ferguson (DS17) interviewed David Neidorf to get his perspective on how students learn at Deep Springs. In place of a conventional letter, David has opted to provide an abbreviated transcript of that interview.

Asa: What do you see as the scope of self-governance at Deep Springs?

It's pretty interesting to read over the letters between L.L. Nunn and the Student Body in the Gray Book, and see that L.L. Nunn assigned all this self-governance power to a collection of teenagers, and then instantly started arguing with them about how they were using it. It's easy to see how that happened, because it's almost impossible, certainly for Americans, not to hear the term "self-governance" as meaning a state of things where nothing outside of you governs, even in the mild sense of limiting what you can do. But that's ultimately a solipsistic state of being—at best I think it's a natural form of idealism or fantasy that many young people, especially strong-minded ones, can benefit from trying out for a time. But it's not actually governance.

Governance in the Deep Springs context isn't separate from responsibility for something in the world outside of yourself—that's why it's a natural fit with Nunn's interest in service and leadership. It means taking over responsibility for the ongoing health of the enterprise, and for improvement of the enterprise. This means the character of our community enterprise limits what you can do. Like any actual, particular community anywhere, it comes already with needs and correlative limits. This fact seems confining at first, but it's also what locates you in the concrete world, gives you something besides your own wishes and desires to care about, lets you test your ability to be responsible for something besides the shifting sands of your own inclinations and tastes.

The hope is that expanding responsibility doesn't merely make people more able to act in the world; over the long run, much like other aspects of a good education, it should expand the self as well.

I've observed that one way most students here learn is that eventually they figure out that effective and hence enjoyable governance is different from self-definition or its political form, self-founding. Sometimes they figure that out in time to respond to it in a fertile and fruitful way. Sometimes they don't figure it out in time, and wind up after two years feeling alienated about it because it didn't turn out how they originally wanted. But that doesn't mean it wasn't something important to think back on later—I've learned to appreciate this educational dynamic by hearing about it from alumni in the first place. And I think when things go well, people here learn it clearly and they learn it earlier in life than most of us.

Is that what you meant? Or when you asked about the scope of self-governance, do you mean what are the things the SB decides and what things not, things like that?

Or what aspects of life.

As Nunn originally conceived of it at Deep Springs, democratic self-governance meant governing the collective life of the dorm. There was no student Labor Commissioner, no students involved in planning college processes, no CurCom or ApCom. All of those things are in the manifest spirit of the college, and they all began relatively soon after Nunn died. They are a beneficial evolution of the program. But once they arise, strictly speaking it's a misnomer to include them in "student self-governance." At this point the "self" has expanded to include the needs, hopes, and happiness of everyone concerned with the governing decisions being made—all the residents of the valley, the alumni community, even sometimes the future students of the college—what organizational theory these days calls "stakeholders." I suppose the Student Body could adopt an "entitlement platform," could assert that those

currently bearing the title of "student-body member" are entitled to treat all these other groups as its servants or its audience. But that would wander far from the educational mission of the place. Much less could be learned that way, and there's no reason anyone would donate their time, money, or expertise to support it. What the expanded scope of governance amounts to is this: the systematic inclusion of students—to a dominant degree whenever they can pull it off—in what every other college and democratic community on the planet calls "shared governance."

I think it's helpful to bear this in mind because, this side of a tyranny, all legitimate governance is shared in various ways. Sure, on some level, we all would like "self-governance" to mean the right or the power to control the world around us in whatever way feels at the time most conducive to our happiness or satisfaction. But it's a waste of time to cling to so naïve and finally solitary a desire. Even if no one else lived in the Valley, I've never seen a Student Body sufficiently one with itself that each individual could feel fulfilled by the results of collective self-governance in everything that felt important. This means real self-governance is always a matter of limitation and partial fulfillment. And that's true of any community anywhere.

You've said self-governance means governance of the self and also democratic self-governance. You said that they are contingent on each other. Does it go both ways?

Yes, you don't get either one without the other. Here's an example: if you want to participate successfully in democratic self-governance, then you have to learn to conduct yourself in a way that lets you gain authority in a discursive space. That requires a lot of things from you. It means learning to be reasonable, learning to be temperate most of the time. It means being consistent about showing up and listening with an open mind and heart, and learning to make, when the time is right, difficult decisions. And it means you need to find the backbone to do a quiet kind of battle with the ever-present folks who want to undermine the discursive space and make it a simple competition for power and control on whatever terms they find more congenial—which means, in turn, you have to grow beyond the "ideal family" wish for everyone to all feel the same way together.



The year's first snow blankets the Main Building.

If you dedicate a few hours or a few years of your life to shared responsibility for an enterprise that's not merely about you, it's going to make unwelcome demands on you at times, demands you are not automatically or easily inclined to rise to. But the experience of doing it anyway draws out your powers and expands your person, the weight and significance of your presence on the earth. I think if you didn't assume responsibility for something, didn't hear that call—if your community never says "we need this effort or this sacrifice from you"—that expanded capacity for governing the self has no occasion to develop. So democratic self-governance helps develop individual self-governance, self-possession, simply because it needs it.

What do you see as the educational purpose of self-governance at Deep Springs?

Practical wisdom. Partly about what's plausible and not plausible, partly about what the world needs from you. And partly wisdom about yourself, a perspective that lets you avoid defeat by the inevitable obstacles, postponements, and frustrations that arise when you think you see the path to progress, but other people can't or won't see the light and don't feel the force of your moral passions or ideas. It's a form of wisdom to learn to persist in your idealism and adjust it to reality, to realize much more is required of you, that it takes time to learn the practical lessons of how and how slowly the needed work can happen. The governance experience here creates better and more nuanced listeners and, when necessary, judges. It certainly creates better committee members, and people who have skills around committees are valuable, since that's where a lot of the world's work gets done.

You'll note I'm not saying the purpose is always to succeed; I think the inevitable frustration of self-governance is a spiritual defeat that's salutary in the long run—provided you aim, as I think Deep Springs does, to help educate robust people who aren't easily thrown off-stride or traumatized, but can bring something of significance to the human enterprise.

Do you think most of the students get that?

I do, to varying degrees. But a lot of the learning isn't visible while here. It's different once students go elsewhere and get involved with some sort of deliberative or governing process, and often find they don't screw them up in the same way as before, or realize they can better contextualize their ups and downs and keep defeats in proportion. From what folks tell me, that's often when it begins to hit you. But none of the lessons I'm talking about are happy successful power experiences. And so it doesn't seem to me a sign of failure when people feel a great deal of ambivalence about self-governance while they're in it and as they finish it. Who doesn't feel a great deal of ambivalence about the lifelong struggle of trying to keep the world afloat and make it a little better? You're not paying attention if you don't.

For this next part of the interview I'll read you a couple quotes from L.L. Nunn and ask for your take on them. "The purpose of Deep Springs is to secure in its members complete renunciation of self, the dedication of one's self and all he can ever become, all he has and all he can ever acquire, to the sentient universe-the taking of the oath of allegiance to the moral order of the universe. This purpose is advanced by intellectual grasp of the problem but also and perhaps more so by the practice of details in conformity with such dedication."

Nunn may have thought that he knew a sentient God with a set of rights and wrongs manifest through some combination of reason and revelation, but I don't think that belief feels plausible for most students today, and certainly not as the basis for democratic decision-making. In our more heterogenous consciences and political communities, there's too much disagreement. There are always dozens of people to stand up and instruct you in the moral order of the universe and how you should serve it. That's the job description of pretty much any political ideology, and on a more subtle level it's the working effect of parents, peers, and activists. But they don't all agree—and a diverse world is a richer world. So there aren't fewer people around today who will claim the right to impose their definitive knowledge of the moral order of the universe on everyone around them. Maybe some anarchists and theocrats,

zealots in general, make this claim. But mostly we defer to that other strain of the Biblical tradition, the one that emphasizes the ineffability of god's will.

To me—although many people differ—it's good that it's impossible to agree in practice about that universal moral order. When the SB holds what are called "ideological discussions" ahead of making practical decisions, it's sometimes really good—it can be a way to mark out a wide-ranging dialectical investigation into what ends we want to be serving. But sometimes it's misleading, because it facilitates the illusion that an explicit moral order can be identified and then directly applied, by calculation or logical inference, to derive the right answer to practical problems of governance. I don't think moral science can replace politics in this way. And if that kind of certain application of universal principles is your standard of legitimacy in governance, you end up delegitimizing the texture of individual differences. In this context, I think talk about "renunciation of self" is all too reminiscent of the way totalitarian movements of the last century invariably asked individual citizens to set aside their private concerns and thoughts for the sake of a collectivity and its notion of justice. Instead of complete renunciation of self, I think it's better to aim at becoming less selfish, in the sense of becoming less enslaved by your own weakness. Another word for this is freedom.

The desire to be certain in your political judgment is natural—it doesn't go away once you realize it can't be satisfied without dishonesty. Today most people don't look to reason or revelation to satisfy that desire—we are more likely to prioritize feelings of indignation, or imagine a secure grounding is provided by a collective act of will like a vision statement in a strategic plan—the founding stipulation of a community's "values," sometimes seen as a collective work of art made from the found materials of history. But the desire to find a set of governing principles so definite that you can set aside the self, and with it the faculty of political judgment that's located there, is to me suspect. It's all too easily a flight from the strenuous, frustrating, endless give and take of democratic political life. People do need to have some working principles in common, if only to facilitate fruitful disagreement, but as Lincoln noted in the Gettysberg Address, those principles are better held as hypotheticals, things we are testing out together.

I wouldn't insist on it for others, but I think there's a simple working translation of the oath to uphold "the moral order of the universe." It's easy to see that wherever you go, there's something wrong, the world's a mess. It's manifestly unjust, people are cruel and short-sighted, it's creaking on its hinges. When you look around you and see what's wrong, at the same time you're seeing something else, an image of what could or should be. That's enough, I think—that image doesn't have to include the entirety and eternality of the universe. It's perfectly reasonable to swear a modified Nunnian oath of allegiance: wherever I am in the world, from among the things around me that are wrong, I will identify a few that I might be able to help fix, and get to work. Functionally, I think that's close enough to what Nunn hoped for.

Here's the next one. "The students individually, but under the Student Body, should take care of the tools. Nobody will or can object to that and from such care will emanate control first and then authority. Were I to issue an absolute order giving authority it would do the Student Body no good and simply place me in the position of being an arbitrary dictator instead of a guiding influence."

Do you think that the authority that the SB has currently, whatever that is, do you think that as it stands it comes from taking care of these tools, or do you think that it is something inherited?

Nunn's comment is like stating the law of gravity—it's simply true. I don't think it's possible to inherit authority, except perhaps fleetingly in a world of fools. You can inherit a title, so you can inherit entitlement. You can inherit some kinds of power, like money or arms. But authority, which I think of as the form of social power that stands as the lone alternative to force, violence, and oppression, can only be earned. You can inherit a little bit of power for a while—becoming a member of the Deep Springs Student Body is to inherit some power, some ability to act in the world. But if you don't convert it into earned authority, it soon enough slides though your fingers. Democratic power that's not exercised in a way that earns authority dissipates into other people's hands, with the same necessity as gravity. So he's right; even if you wanted to, you can't give anybody authority over anything. You can only give

them the opportunity to earn it and vindicate it by their actions.

What does power mean in self-governance at Deep Springs?

Think of it this way: you get to Deep Springs and people say it's up to you as a Student Body to take care of these tools—well, that's not because you're somehow magically autonomous. "Beneficial ownership" means receiving the benefits of property you don't control. It's up to you because other people with power are giving you, for educational purposes, the chance to share and even supplant their power—in the hope that eventually, by assuming it, you will make theirs superfluous. But the tools and chores of the college, the materials and needs of the world, are still there no matter what you do with that chance. You can erase them from your internal landscape of concern, but they will still be there in the world around you. The world doesn't mirror your internal landscape—that's why responding to the world's needs means expansion of the self. So if you don't take up that power, if you don't live up to that responsibility for the world beyond you, naturally you lose it.

This fact isn't anyone's choice, and so no one can decide to make it otherwise. But there's no good reason that it should be or could be any other way. Where in life, outside of short-lived pockets of sorry decadence and corruption, do people get to control possessions for long without using them in some sort of virtuous way? It seems to me that one of the greatest gifts Deep Springs gives to young people is the chance to develop a legitimate authority, both individually and as a community. Often enough the students here don't take it up to the degree some hope, and sometimes that's for understandable reasons that aren't really matters of blame. Since it's not a matter of blame, the loss of authority isn't a punishment—it's just the natural way of things. People who don't or can't take up responsibility effectively can't retain any authority. Why should they? I want to emphasize that this final question (Why should they?) isn't a form of rhetorical emphasis. It's a real question. It's important that everyone try to find an explainable answer that's different from mine. §

Director of Development's Letter

John Dewis DS94

Thoreau calls the first chapter of Walden "Economy" to remind us that we need fewer material comforts than we think, and possibly to make fun of himself for being cheap. It also provides the missing chapter of an Economics textbook: the cost-benefit of living alone in the woods. In this sense he could just as easily have called it "Ecology." Both words take their first half from the Greek word for household, making economy the laws of the household and ecology its study.

One of the many remarkable things about Deep Springs is just how much time people spend outdoors. It's not always easy to go back in! I learned at the Centennial that Alex Burger DS90 and I both slept outside in our sleeping bags during our respective (and very cold) first semesters at Harvard (Adams House courtyard and Currier House rooftop were good spots, for any current readership at Harvard, very much at your own risk).

In LA county, where I live now, if you're not at home you tend to be in your car, and so ecology is for 11 million people an intimate knowledge of the freeway system. When we get where we are going, we talk about how we got there, how we might get home, and then we go. This urban ecology has been reified into an economy by mobile phone applications that tell us precisely where to go, like Waze. Suddenly a whole lot of people in LA have very little to discuss; or at least "How did you get here?" has been replaced by "How did it say to get here?" In either case you don't ever hear, "Did you see anything interesting on your way here?" which was Thoreau's rationale for walking to Fitchburg in 1846 instead of taking the train. It might be too jejune, or too obvious, or too vintage Deep Springs cliché to say it, but at Deep Springs the whole Valley is your household. You might even call its study an ecology of scale.

And at Deep Springs even local bearings are ecological. I spoke on the phone yesterday with George Hardy DS54. Despite living in the Valley 65 years ago, his memory of the shape of Soldier Pass is fresh and the flora that grows on either side of it, which he says varies because the rock does, coming from two ranges in collision. Living, working, and wandering on the land is one good way of getting to know it. It is the topic of this Newsletter to ask the further question, does Deep Springs also prompt its students to pursue careers in ecology, or to think more broadly or deeply about our natural environment?

Take the birds. You could use them to make a pretty good map of the campus. The Scrub Jay hangs out near the Boarding House and will eat an almond from your hand if you have an hour to commit to his courage.

A handful of Cedar Waxwings could be found outside the Museum each winter in the mid-1990s, folded up dead on the ground. Perhaps they still can? Probable cause is provided by the first lines of Nabokov's Pale Fire: "I was the shadow of the waxwing slain/ By the false azure of the window pane."

The crows are at the dairy (doing fine); the Great Horned Owls are at the lower reservoir (eating whatever they want); and the night hawks are at the upper reservoir (being subtle). You can hear the night hawks grab sips of water on the wing, like swallows and bats.

It wasn't until an evening walk two years ago with Martin Dolsky DS15, however, that I heard bats "sip" a cow. The student butcher put the carcass up at the dead animal dump earlier that day, and by dusk the bats were swooping by in great arcs, snatching mouthfuls of its ragged flesh on-the-fly. One spring in the first century BC somewhere near Rome, Lucretius watched a river become a field, and a field become cows, and reasoned they must all be made of the same thing. He became an adamant atomist.

Starlings are an interesting case because they were introduced from the UK as a flock of 60 to New York's Central



Aadit (DS17) and TJ (DS17) relax on the Smoking Porch before End of Term Dinner.

Park in 1890 by an enthusiastic birder who wanted America to be home to all birds mentioned in Shakespeare (the chatter of Starlings is invoked as a threat in Henry IV Part 1). As long as I can remember, they've lived in the chicken coop. A fast chicken is slower than a slow Starling. One enterprising feed man in the early 90s gathered them up in a big box and drove them over Gilbert Pass where he released them into the wild and watched as the whole flock swarmed beautifully back to the chicken coop in time for his feed run.

The sparrows are typically at the corrals, making their homes in the Cottonwoods that Iris Pope planted to shade the horses. The sparrows lift into the air whenever a gust of wind turns the corrals into a big pipe organ. Lucretius also thought wind must be full of atoms if it was capable of swaying trees and carving rock.

The sciences at Deep Springs cannot help but take us back to its roots; careful observation of nature is a practical necessity for effective labor, a constant companion to our most searching conversations, and an enduring inspiration for fresh thoughts. Conversation with alums reinforces my own conviction that the Valley itself is not merely incidental to a life of service: our stunning environment helps us listen carefully, breathe deeply, and understand that we are all passing moments in a long sweep of sand and wind.

The kids who grow up at Deep Springs because their parents teach and work here are likely to know the smell of water better than most, how to catch a lizard (and how long it takes to grow back its tail), and whether the owls have been eating scorpions. For students, all the money in the world could not purchase a better lab.

And even for those who do not pursue the sciences professionally, the desert speaks. If we are not already convinced, Thoreau quotes Damodara, whose time as a shepherd in 15th-century Kerala led him to astronomical discovery: "There are none happy in the world but beings who enjoy freely a vast horizon." By which beings he either means humans at Deep Springs or birds everywhere.

With best regards,

John «

SB Presidents' Letter

Mo Katz-Christy DS18 and Ryn Delgado DS18

Spring is in the air! We turned the wheel lines on last week and farm team has been busy moving and repairing. As the willows start to leaf out around the lower reservoir, students can be found taking quick dips, kayaking, or just reading with their toes in the water. Swarms of migrating painted ladies have landed and are busy pollinating the flowering plum trees. Garlic is thriving in the new beds we built last fall under the orchard trees, especially since we thinned some of the green garlic for soup in the BH!

Inside, spring means electing new committee chairs. Sammy has just been elected ComCom chair, Levi has been elected CurCom Chair, and RCom and ApCom elections are coming soon. We have complete faith in all the chairs' abilities and are honored to have them serve the community in this way next year. Also, congratulations to Anousha for being elected Budget and Operations Trustee!

We—Mo and Ryn—are currently serving as co-presidents of the student body. We are excited to bring more collaboration to SB, and have been discussing methods of consensus that we hope to implement, at least in small ways. As a body, we are in the middle of going through some old senses of the body to decide which we will re-adopt and bring back into our current consciousness.

On the upcoming full moon, the student body will be making our long-awaited trip to the Dunes. And next term, the entire student body will collaborate to put on a non-audition play for the community! We are currently dividing into teams—actors, musicians, costume designers and set builders. Will it be A Midsummer Night's Dream? Stay tuned! §

Spring Courses

The Contemporary Crisis of Liberalism - David Neidorf

This class focuses on defining, understanding, and criticizing "liberalism"—a form of social and political association that imperfectly embodies and takes its bearing from those old saws—respect for individual rights of property, association, and conscience, embedded in certain typical ideals; the rule of law, representative governance, political and the social equality, freedom of speech, separation of church and state, religious toleration. Students look at a wide variety of authors and texts ranging from foundational to contemporary, all with the goal of "learning how to make progress, and finding out what to make of the different contemporary criticisms of liberalism."

Celestial Navigation - Amity Wilczek

Answering such questions as "How can you locate yourself, within one mile, using only the tools of a sextant and watch?", "Why is Polaris a good pole star now, treated almost as a fixed point in the sky, and why was it less good for the Greeks?", and "What stars are most useful to navigate by, why, and in what circumstances?", this course is aimed at learning to "navigate the sky" and "navigate by the sky".

Early Modern Political Philosophy - David McNeill

This course focuses on four of the foundational thinkers of modern European political thought: Niccolò Machiavelli, Thomas Hobbes, John Locke, and Jean-Jacques Rousseau. Some of the questions considered include whether—and in what sense—human beings are by nature political, the character of modernity, the relation between political power and legitimacy, the place of religion in political society, and the nature of political philosophy itself. Students look at the history (or prehistory) of our concept of inalienable individual rights, the development of modern social contract theory, and the place of private property in modern conceptions of liberty.

Wittgenstein's Philosophical Investigations - David McNeill

This course is devoted to a close reading of Ludwig Wittgenstein's posthumously published magnum opus, *Philosophical Investigations*. It is an extraordinarily controversial text within philosophy, since it explicitly disavows the idea that philosophy properly understood is an explanatory endeavor. Its point is rather, as Wittgenstein indicates at one point in the *Investigations*, 'therapeutic,' and his method apparently points towards dissolving rather than solving philosophic problems. Students begin with a rapid reading of the *Tractatus Logico-Philosophicus* before spending the rest of the semester closely reading the *Investigations*.

Reimagining Education: Theory and Practice - Laura Nelson

This course looks to theoretical and philosophical writings on education from the twentieth century through the present. Reading across disciplines and fields, students look at the ways that thinkers have articulated visions for what education could look like. Alongside these theoretical and philosophical works, students turn to alternatives and experiments in education, including (but not limited to) Highlander Folk School, Deep Springs, Black Mountain College, Citizenship Schools, Freedom Schools, free universities, and liberation schools, drawing upon primary source material and secondary scholarship that contextualizes and interprets these projects. Moving between philosophical texts and experiments in education, students reflect on the relationship between theory and practice, looking at how educators have imagined and sought to bring about myriad ways of learning and thinking together.





Theories of the Origin of the World and Living Things - Linda Wiener

The three main theories of how things came to be are that the world is all mechanical, a matter of chance and necessity; that there is a mind at work, a creator who fashioned things according to a plan; and a middle position that can take many forms, some of which are vitalism and structuralism. In this course, students read three major ancient works that put forth these positions: Lucretius' great epic poem on pre-Socratic atomic theory, *On Nature*, sometimes called *The Nature of Things*, Plato's *Timaeus*, and Aristotle's *Physics*. All make arguments about the nature and meaning of time, of the universe, of earth, and of living things. Students also read more modern works examining these three positions by authors such as Hume, Kant, and Bergson. As the semester ends, students will look at current debates among neo-Darwinists, proponents of intelligent design, and various scientists and philosophers seeking a middle ground between mechanism and creationism.

Phenomenology: Theory and Practice - Linda Wiener

In this course, students read Maurice Merleau-Ponty's philosophical book *The Phenomenology of Perception*. Concurrently, students consider in some detail a few examples of phenomenological science, including Ptolemy's account of the earth centered universe in which he seeks to "save the appearances" of the movement of the sun around the earth. Using all these texts and examples, students can come to a more sophisticated understanding of the strengths and limitations of reductive science and what they can learn from a phenomenological approach.

Poetry Workshop: Form and Content - Sarah Stickney

This poetry workshop focuses on the relationship between form and content in poetry. Students study many of the traditional forms of poetry as well as the ways that these forms have been upended, subverted, and generally dissolved. For instance, students read the sonnet as rendered by Shakespeare, Wyatt, and Yeats, but also study looser, contemporary renderings of "sonnet" by John Berryman, Bruce Snider, Marie Ponsot, and others. Students read great poems and examine them through the lens of formal prosody as well as that of style, image, tone, rhythm, syntax, metaphor, etc. The second class per week is a workshop, in which student poems are read and discussed. The workshop assignments are loosely based on the forms being studied.

Dante's Divine Comedy - Sarah Stickney

Hell! Heaven! The best of Italian poetry! In this close-reading course students read *Inferno*, *Purgatorio*, and *Paradiso*. Dante was the first major author to compose his work in Italian instead of Latin (a shocking innovation at the time), and thus he is credited with inventing written Italian. The class is student-driven and discussion based. The class sometimes compares different published translations as a way of deepening students' understanding both of Dante's work and the difficulty in capturing his sublime style. §

Interview with visiting professor Laura Nelson

Trinity Andrews DS18

How did your academic path lead you to Deep Springs?

After my undergrad at UVA, I did my graduate studies in Literature at Oxford. It was there that I became involved with a farm group and started driving a vegetable van. I'm really interested in different communities of learning—both formal and informal. I think the first Deep Springer I met was Tim McGuinness (DS09). We met through this James Baldwin reading group that I was somehow in even though I'd left Oxford. I heard about Deep Springs through him, and I also visited the Arete Project in its first summer in Sebastopol. A friend and I went there and gave talks and sat in on their community meetings. I also met Laura Marcus—the other Laura!

Right now, I'm working on finishing my PhD in American Studies. I'm focusing on the history of social movements in education and imaginative spaces of learning. I'm really looking at the questions of what education is and what it can do. That's one of the things that brought me to Deep Springs.

What are your favorite experimental institutions?

I've been looking into the Black Panther schools recently. Their Oakland Community Schools were run by women and were vibrant centers for the whole community to learn. They had mandatory meditation and subjects the students they were serving wouldn't have otherwise had access to. They were really spaces for people to come together and create.

A project I'm involved in is the Oakland Summer School. It's a group of artists, writers, and community organizers putting on a series of seminars. We have them on really broad topics and it's a super dynamic space.

You seem really into the East Bay. What makes Oakland stand out to you?

I think there's a really great energy in Oakland. There's such a great community of people creating and learning. It's also really great to be in a place with a rich history of inspiring movements.

What do you think makes a good community?

My favorite communities are those that are creating something tangible, especially those where it feels like projects are shared. They foster conversations about ideas that are important to members. I like communities that are imagining and dreaming, and that are welcoming to all. I think it's really important for communities to be dynamic and open to change, and actively seeking diversity.

What was surprising about the community at Deep Springs?

I was surprised at how full and busy the days are here. I wasn't expecting such a vibrant social life. There's always somewhere to be and always something happening. Also, people's intellectual life isn't confined to the classroom. Of course a lot of learning happens in seminars, but it also happens at lunch, at the reservoirs, and on walks.

Thank you Laura! §

Update from Deep Springs Resource Management Team

Tim Gipson, Ranch Manager

At 10 am those in attendance departed for Antelope Springs to look at the pipeline project.

This winter the original two-inch pipe that comes out of the intake for the pipeline lost the plug and diverted a large amount of water from the spring. Although most of the water found its way back to the stream bed there was some concern about the disruption of flow into the stream bed below the intake. The problem was fixed when the new pipeline was attached to the 2-inch pipe from the inlet and shut off valves were installed. California Fish and Wildlife asked if we could make a trip to examine the new pipeline and shut off valves.



Tim trains students for branding.

During our trip it was determined that there has been a reduction in flow from Antelope Springs above the intake. Although the cause of the reduction was not determined, it was agreed upon that there definitely has been a decrease, indicated by dying vegetation in areas that were previously wet in the spring.

After much discussion it was agreed that Deep Springs would finish the pipeline project to the satisfaction of Natural Resources Conservation Service (NCRS), but not use the pipeline in 2019 to allow uninterrupted recharge to the areas below the intake.

After a lunch of Deep Springs hamburger, the afternoon session of the meeting took place in the Museum.

After brief introductions, Ryan Klausch (BLM) gave us a very detailed presentation of the proposed range improvements and water developments for the South Oasis Valley and Deep Springs allotments. These improvements were first proposed in March 2013. Although not yet finalized, due to Ryan's hard work, it looks as if they are now on the fast track after years of intermittent attention.

After Ryan's presentation, Rob Pearce (NRCS) gave us a brief presentation of the history of the DSRMT and its original Memorandum of Understanding (MOU). The original MOU gave the team a great amount of authority on the forest allotment. But due to the fact that the signed copy of the MOU has not been found, this authority has often not been recognized by some previous Forest Service officials.

After Rob's presentation there were agency reports and much back and forth between the various agency representatives, along with a few questions from the attending students.

Unlike past meetings that have ended before the official cut-off time, this meeting went up to the 4:30 time limit, and there were several continuing discussions after the meeting was adjourned.

Overall it was a very productive and informative meeting that will be followed up with future meetings between Deep Springs and BLM both here and at the Ridgecrest office.

Thank you everyone for attending. Thank you to the agency people for your hard work and your willingness to be a part of this historic and co-operative team. §

Goodbye, Martha!

Izzy Pisarksy DS18

At the end of Term Four, the Deep Springs community was sad to give our final farewells to Martha, our BH Manager. After more than two and a half years, Martha has served in her capacity as BH Manager longer than anyone has for more than a dozen years. Next on her plate is finishing her dream house in Idaho, near the Tetons. We are excited to welcome Gabe Sanders as our new BH Manager. However, after her invaluable stint serving this community, we would be remiss to not give Martha a proper goodbye. What follows is an excerpt of a speech by Izzy Pisarsky (DS18) doing just that.

Sitting in the BH, every once in a while someone holding a cup of coffee will look up and say, "Dude! Martha is leaving at the end of term." And there are long exhales and some omigod-I-can't-believe-its. Some what-are-wegonna-do-without-hers. Some time-is-flying-by-so-fast-it's-wilds.

But between deadlines and to-do lists and procrastinatory naps, there isn't too much time to dwell on the fact that Martha is leaving because, really, what does it even mean? Maybe our lunches will be spiced differently, maybe our aprons won't be as pretty, maybe some knives and cookbooks will be gone, maybe there won't be any more down-with-the-patriarchy signs. No one will yell at me for not having wiped the flour off the counter or for forgetting to clean the Cuisinart, or more likely, it'll be Gabe's voice doing that instead.

But there is also a part of me that is more restless, that worries that it won't just be the flowers on the tablecloth that disappear but something more important than that. Maybe I have been focusing on the wrong things, and focusing on Martha would have been the right thing. Asking her more about why potatoes go in cold water, talking to her more about her time in the Grand Canyon, listening to her more about her life and her ideas and what she thinks of this place. That part of me is writing this speech right now. And it's a predicament because when I try to make meaning of Martha, and make meaning of Martha leaving, I have to realize very quickly that I don't actually know who she is.

There is a book about the first women who were river guides in the Grand Canyon. Chapter fifteen is written about Martha Clark. She is asked about her favorite rapid of the canyon: "Granite is right up there because I feel the water has so much power over the boat and me. I like it because it's unpredictable; I can't say for sure what's going to happen. I feel like the river takes me in its hands. I don't have a lot of control. It's scary a little but I guess I like being a little scared. The unknown that's pleasure, pure pleasure."

Martha told me once that the book, *Breaking the Current*, made her into a feminist hero, a Grand Canyon pioneer she didn't want to be because she didn't see herself as that. She was just doing what she loved.

I see her, head bent over the wooden kitchen counter, framed by the doorway, sunlight pouring in and giving her hair a golden-silver glow. I can smell her when she opens up grocery bags, filled with almond paste and semi-sweet chocolate chips and lemon extract. I can feel her touch when I look at her hands, covered in cuts and burns, sifting together egg whites and coconut, so much more confident and practiced than I am. I can taste her in the chili that always seems too much to me. I hear her in the rebukes yelled over Kanye West, or the conspiratorial whispers about the back porch of her restaurant in Alaska, or her hoarse laughter drowning out Abie's soft chuckle.

Martha, I wish I could have written better about you, without also having to talk about that I'm terrified of time passing, of the second-years leaving, of our not making the best of our time here. What it all comes down to is that I want to say thank you for being here and shaping my impressions of this place, for the work you put in. The German author Theodor Fontane said, "Goodbyes have to be short like declarations of love." This is both a goodbye and a declaration of love. §

The Ecology of Deep Springs

Padraic Macleish DS99, Director of Operations and Mehcnic

For those fortunate enough to have lived there, Deep Springs is often referred to simply as "the Valley." The place itself is so singular that no other name is needed: indefatigable desert fauna, pasty and stark lake plans, and distant views of the snow-capped Sierra help maintain perspective for the students of the College.

L.L. Nunn believed that the desert had a voice. For generations, students at Deep Springs have listened and learned: about themselves, their peers, and about the desert itself. For many graduates, the path to a life of service has been through a career in intimate connection with the ecology of our home on earth. Farmers and ranchers, scientists, and outdoor enthusiasts have all found their start within the confines of this valley.

It's a small wonder that this isolated and beautiful oasis would spark such deep respect for the natural world. From the simple joy of watching hummingbirds during their annual visit to the Valley to the awesome wonder of the stark western face of the Sierra, we are constantly reminded of humanity's small place in and outsized influence on the natural world. Academics on campus study the world around us: studying Joshua trees on the northern fringe of the Mojave Desert, observing the synclines and anticlines of the Poleta Folds in the south end of the Valley, and documenting insect life in the midst of the Main Circle. Attentiveness to the natural world plays a vital role in the labor pillar as well. Students learn about soil science and natural systems as they participate in the work of the farm and ranch. And self-governance begins and ends with the management of the natural resourcs that make life here possible.

What does ecology have to do with a life a service? How does a Deep Springs education prepare students to turn a passion for the natural world into actions that benefit all of humanity? In this issue we explore these questions through reflections and interviews from past and present members of the Deep Springs community. §

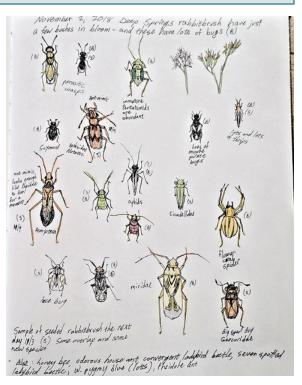
Throughout this section we're including selections of Sammy Bennis's (DS18) Field Biology project—a database of mushrooms in the Valley.

A Recent Arrival's Experience

Linda Wiener, Visiting Professor

Deep Springs Valley is an exciting place for a field biologist. When I arrived at the end of August as a visiting professor teaching natural sciences, I was new to the Eastern Sierras. The isolation of Deep Springs Valley and the many plants and animals I had never even seen or heard of before made me want to get out in this new environment with my binoculars, magnifying lens, collecting vials, and field notebook. I taught Field Biology last semester and so could learn about this new environment together with my students, as well as do my own work. I specialize in insects and spiders and these, along with the plant life they are associated with, were the main focus of my own studies.

I have kept field notebooks for many years in which I record my observations and experiments in words and especially through drawing. One of my early observations was that shrub species



Some of Linda's sketches from the field.



A portion of the frieze Linda painted in her house

which occur in the Valley and also where I live in Santa Fe, New Mexico, looked rather different here. There were unusual glands or a different fragrance, yet the same species name. In fact, because we are ringed with mountains, the Valley becomes something of a biological island. The same species of shrub in Eureka valley or Fish Lake Valley seem to me to have their own variations. I have not studied this enough to determine if these variations are consistent enough to be confident in saying for example, exactly which valley a sample of rabbitbrush came from.

I set three pitfall traps out in the scrub lands behind my apartment. I opened them every night and checked them every morning (except when rain, snow, cold or my absence from the valley prevented it). These traps are just quart containers set in the ground which catch animals walking along at night. So far, I have identified 69 different species of insects, arachnids, and one lizard from these traps. I also turn on my porch light and see what shows up there (mostly moths). Some unusual finds are a moth in which the females have short wings and cannot fly. This species was recorded once before in Eureka Valley in 1978, so the people in an online moth watching community I belong to were pretty excited. I also found a spider that I suspect is a new, undescribed species in the genus Castianeira., a group of spiders that mimic ants. It will take me awhile to confirm this, but it does not appear in the major key to the genus.

I've never been very good at bird identification, but the lower reservoir always has some interesting bird life and bird behavior to observe. I've been tagging along with visiting birders (we are a birding hot spot) who have taught me a lot.

Right now, March 19, I am thrilled at all the signs of spring—plants greening up, painted lady butterflies, birds migrating through, ants opening their nests—that have increased significantly even in the last few days. During the cold days of winter when most the bug and plant life was dormant, I went back to my field notebooks from Terms Two and Three and painted a Deep Springs animal frieze around the walls of my apartment living room. It has 78 animals, all of which I have observed in Deep Springs Valley.

This has been a fabulous year for me as a biologist and I will return to New Mexico with a much deeper knowledge of the biology and ecology of this unusual part of the country. §



A Woodhouse's scrub jay, spotted near the Lower Reservoir.

Interview with Mitch Hunter DS03

Townes Nelson DS17

How did your time at Deep Springs influence your interest in ecology and agronomy? Were you already interested in these subjects before you arrived in the Valley?

Deep Springs is a huge part of the reason I do what I do. When I arrived, I wanted to be an architect or land-use planner. But I had also grown up visiting my grandparents' farm in Illinois, so I was drawn to the ranch immediately. You might say I came to the desert "for ranch life" more than I ought to have. I had also always been interested in the environment, so the ecological story unfolding in the Valley drew me in. Starting with John McPhee's Basin and Range and Assembling California in Ross Peterson's Summer Seminar, and then Jack Holt's geology class, I focused



on learning to read the landscape. Ecology was never taught while I was at Deep Springs, but it was clearly central to the way the ranch was managed, and learning the desert vegetation was a nice complement to the cowboy machismo.

The holistic range management team [now called the Deep Springs Resource Management Team] that Geoff Pope put together is an enduring inspiration. It's a great example of ecology in the broad sense, as both applied environmental science and a social process. The team improved the management of the ranch both substantively, by informing decisions about how and when to graze, and by building trust among all the stakeholders. This model is a big part of what inspired me to study political science; I wanted to apply it to big agro-environmental challenges through policy development. I have unfortunately since learned that it's difficult to build barrier-breaking common cause in efforts to address complex national issues, but the range management team remains a touchstone nonetheless, and is directly applicable at smaller scales.

How likely is it that, by 2050, we will be able both to adequately increase agriculture production to meet demand and decrease agriculture emissions to avoid the worst effects of climate change?

This is my central question and the answer totally depends on the meaning of "be able to." The best estimates suggest that humans will demand ~20-60% more of the major commodity crops by 2050, while greenhouse gas emissions must drop by 80%. Technically, we can absolutely do this, while improving diets, eliminating hunger, enhancing social equity, and reaping a wide range of environmental benefits.



Battarrea Phalloides; Desert Stalked Puffball

Location: Near Highway 168, by the turnoff to Deep Springs Ranch Road.

Size: 1.5 feet tall.

Uses: It can be eaten, or used as a cicatrizant, an antipruritic, or an antiseptic agent.

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Interview with Jack Murphy DS78

Sammy Bennis DS18

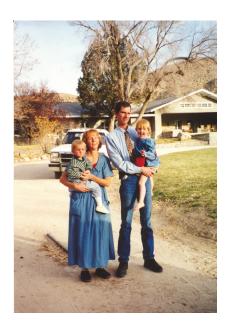
Jack Murphy, Ph.D., is a professor and researcher of biology at Humboldt State University. Jack was Deep Springs' Long Term Science Professor and Dean 1997-2002.

What drove you towards the study of environmental science?

E. O. Wilson proposed his biophilia hypothesis, which says that humans have an innate love of biodiversity. I don't know if I believe him, but if it's true, I think was given an extra dose of that love. I've always been attracted to critters, and from an early age started a garden, explored the woods, climbed trees, live-trapped raccoons (and skunks...), watched things swim around in pond scum.

At Deep Springs, I learned how to slaughter but often slowed down the job with distracting investigations into viscera. I often fled from the stresses of community life into the wilderness—though I'm not so sure if that was really what Nunn had in mind: weren't we isolated so that we couldn't escape each other? Often alone, I watched horses and burros around Tule Pass, gazed off toward the Eureka Valley Dunes and Death Valley, and had a million forgotten adventures. I learned to live outside and never really wanted to come back in.

As a young adult, the destruction of nature became visceral and poisonous to me when one of my favorite mushroom hunting spots (a fairy forest in Humboldt County) was clearcut. I'd heard of "environmental destruction" before



but this was personal. It didn't matter to me that this was private land, that the trees had been planted by the owners for timber, and that I was trespassing; such violence against nature could not prevail! I dedicated myself to fighting it. Ironically, I now kind of support the way timber is managed up here. But you know what they say: "If you're not radical when you're young, you have no heart. If you're not conservative when you're old, you have no brain."

I am sorry, Nunnians, I did not dedicate myself to a life of service to humanity. I dedicated it to a life of service to what I conceived of as nature. We could have a long conversation about whether humans are natural or not and if working for conservation is also working for humanity's long-term interests, but I will not deceive you. My primary interest is in preservation of biodiversity for its own sake.

The rest of my career tale is boring. In a nutshell, I'm not gifted with the kind of gab that makes a good politician or lawyer, but I can spew science pretty well, so my path led to science education. Couldn't hack fifth graders, so I sought out higher education.

Why the focus on mycology?

After earning a B.S. in Biology, I odd-jobbed it for a few years. During that period of soul-searching and minimum-wage earnings, I continued to teach myself ornithology and mycology. I just liked those critters—still do. And others, too. But I knew I had to get a graduate degree to teach in college and focus on something while there, and there are far fewer mycologists than ornithologists—so thinking there would be more opportunities for research, I chose mycology. There were about five (old white men) in the U.S. at the time studying the ecology and evolution of mushrooms, and only one would have me, so away I went from the Left Coast to the Right.

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Interview with Geoff Pope (Ranch Manager, 1982-2005)

Sammy Mohamed Bennis DS18

Could you say a bit about the work you do currently?

I started Black Mountain Air Service (BMAS) in 2005, the same year that I retired from Deep Springs. From the very beginning, I did wildlife telemetry flights for the California Department of Fish and Game (now Fish and Wildlife). Over the years at Deep Springs, I made several contacts with people at Fish and Wildlife, and those contacts were instrumental in getting me started flying for them. For most of the years since then I've done a variety of flying jobs—air charters, scenic flights, flight instruction and aircraft rental as well as telemetry and a variety of natural resource missions.

In the last year or so, I have been streamlining the flying that I do and have narrowed down the scope of my work to specifically telemetry. For CDFW, I track mainly bighorn sheep and mule deer, and for the BLM, I track sage grouse as part of a bi-state sage grouse study. In the past, I have also tracked leaf-nosed bats, hoary bats, eared grebes, mountain lions, bears, and bobcats. I've also done low-level migratory bird surveys for the Los Angeles Department of Water and Power on Bridgeport, Mono and Crowley Lakes.

What did you do before being Ranch Manager at Deep Springs and founder of BMAS?

I was raised on a ranch in Montana. Although I did a number of things after college, in the years before I came to DS I worked on several ranches in California and Nevada, and briefly ran my own small herd of cattle and sheep on the homeplace in Montana.

What drove you towards a career involving nature and animal life?

Well, I would say that growing up on a ranch instills a love of nature from the very beginning. Even though cattle ranching has been under fire for some time, I haven't met many ranchers who don't love nature. At Deep Springs it was very important to me to operate the place in an environmentally sound manner. That is what lead me to pursue some modern developments in grazing and to form the Deep Springs Resource Management Team in 1992. Also, while at Deep Springs, I became a volunteer pilot for Lighthawk, an organization that uses donated flights to raise awareness of environmental issues.

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Lactarius Montanus, Mountain Milkcap

Location: Found at Wyman Creek on September 28th, 2018.

Size: The largest was \sim 1.5 inches in diameter, and all less than an inch in height.

Uses: None yet identified. Edibility unknown.

Interview with Sam Laney DS87

Townes Nelson DS17

Sam Laney DS87 has returned to serve the Deep Springs community twice as visiting a visiting science professor.

How did your time at Deep Springs influence your interest in ecology? Were you already interested in the subject before you arrived in the Valley?

I was interested in nature and environmental science before coming to Deep Springs but I didn't have much prior exposure to ecology as a discipline. In retrospect I probably underestimated how math-intensive ecology could be,



and so in that respect it's a good thing Deep Springs directed me to Cornell via Telluride House. If I hadn't been accepted to Deep Springs my backup school was a very small environmental college in Wisconsin, which looking back probably wouldn't have kept my interest long enough to even graduate. It certainly wouldn't have led me to the newly-established biological engineering program at Cornell which in turn opened doors that positioned me for a later doctorate in phytoplankton ecology.

How does studying aquatic organisms compare to studying their terrestrial counterparts?

Certainly there are some distinct challenges with the mechanics of doing ecological research in ocean environments, like needing to use research ships to get to your study sites and conduct observations and experiments there. In addition I think we also rely a lot more on instrumentation and

sensors in order to observe oceanic ecological dynamics whose terrestrial analogs might be simply measurable by eye. It's also important to recognize that there are fundamental differences between ocean environments and those on land that terrestrial organisms such as ourselves might not intuitively appreciate. For example, many questions in terrestrial ecology involve seasons or the weather. Does the ocean even have seasons or weather? The answer of course is yes, but not in ways that would be immediately obvious from knowledge of terrestrial systems.

Your primary subject of study is phytoplankton—what questions have you been investigating recently?

I've spent much of the past five years working in polar regions studying plant life in and under sea ice. Polar oceans remain poorly studied and so much of my research there focuses on questions that were answered in the rest of the ocean fifty years ago or earlier. For example, until recently we had very little knowledge of seasonality in phytoplankton abundance in the deep central Arctic where sea ice persists year-round. I worked with other oceanographers to develop robotic approaches to measure this basic aspect of polar phytoplankton ecology and relay those observations back via satellite. We now we have a much better understanding of when, where, and how deep polar phytoplankton occur under Arctic sea ice.

What advice would you give to an undergraduate interested in studying ecology or STEM fields more broadly?

One piece of advice would be to learn math, as much as you can. Certainly build yourself an intellectual foundation in calculus and differential equations. Linear algebra is also essential for doing robust work in population modeling. Strongly consider taking a course in statistics and learn how to program a computer in a language that is used in ecology. One reason progress remains stuck in many areas of ecology is that the quantitative approaches required to tackle such problems have yet to be refined or even invented in some cases. With even a moderate grasp of mathematics you'll be able to advance understanding in some very interesting areas of ecology that simply can't be addressed qualitatively.

Interview with James Hayden DS99

Trinity Andrews DS18

What brought you to Deep Springs and to the University of Florida?

I first heard about Deep Springs from my father, who heard about it from an alumnus who worked with him. I considered Deep Springs again when I was looking into small liberal arts colleges.

I work for the Florida Department of Agriculture, Division of Plant Industry, which is headquartered on UF grounds for historical and collaborative reasons. I am a taxonomist (systematist), and the (paying) jobs for us are few and competitive. When this position opened when I was a post-doc in 2010, I jumped on it.



What is first the difference that draws your attention between subtropical climates and desert climates?

I have collected moths (at light) in both habitats. On a given night, I can get larger numbers of fewer species in a desert. I get a lot of uncommon species in both habitats, but in subtropical Florida, I don't get great flushes of certain species when they all emerge. It's probably because they are in tune with their host plants, which grow and bloom during more restricted times in the desert. That said, I don't have any quantitative comparative studies on hand to back up that assertion—just my experience.

I could give a taxonomic answer too. In deserts, widely distributed species can have a lot of variation (such as in wing pattern) across their geographic ranges without decisive demarcations. In deserts, it's harder to say where one species ends and another begins.

Why did you first go into butterflies and moths?

I am drawn to questions and knowledge gaps in science, and I perceived a real deficit of knowledge about moths. (I was never into butterflies, still not.) When I was a kid in the 1990s, growing up far from museums and without good books or online resources, I wondered what these strange-looking things were coming to my porch lights. I got into invertebratology and entomology, but scientific information about moths was and still is typically hard to access for various reasons. I collected insects at DS my final term, but I didn't have much to identify the moths with. My undergraduate entomology professor at Columbia was an excellent general authority, but he was like most entomologists: if one isn't a specialist in Lepidoptera, that is the order about which, on average, one knows the least. One good book chapter, written by an authority who later advised and collaborated with me, inspired me to study specifically Pyraloidea. That is one of the largest evolutionary radiations of moths, the most ecologically and phenotypically diverse, and poorly known in terms of phylogeny and species diversity. Choosing this group paid off, because the species' economic importance probably got me my job.

More generally, I was inspired to go into biological systematics in part when I read E.O. Wilson's *Diversity of Life* in middle school. I dropped it for other interests (the classics, etc.) in high school and college, but I came back to it when I took a year off after Deep Springs. There aren't enough taxonomists in the world, so hey, I should just give into my inclinations and become one. I chose to finish my B.S. at Columbia University, which made available the resources in New York City such as the American Museum of Natural History.

Interview with Nate Sibinga DS07

Aadit Narula Gupta DS17

Could you tell us a little bit more about yourself? Where are you from, where do you live now, and what do you do?

I grew up on the East coast, I went to high school in the New York suburbs, and I came to Deep Springs directly out of school. I knew I was interested in science in a broad sense. I had worked in a physiology lab over the summer, doing biophysics and cardiology when I was in high school. Over my two years at Deep Springs, there was no long-term science chair, so I was pretty ready to get back into science when I left. I went to Brown and studied marine biology and marine ecology, and I did my research project on salt marsh ecology, looking at how the spatial layout of a marsh affected the height and biomass allocation of marsh grass. I got really interested in the problem of overfishing, which is a global issue with interesting and grave consequences related to the destruction of food webs. If you move predators from a system, you get increases in the population of its prey which may be grazing on, say, seaweed or coral. Seaweed or coral populations, therefore, also get decimated as part of a runaway chain reaction related to fishing. I was deeply dissatisfied with the solutions that ecologists had for overfishing, which all boiled down to fishing less. It didn't seem like it solved the root issue, which is our need for food. It drove me to think about alternatives to fishing, and that's how I got into sustainable fish farming.

The question, then, was what does sustainability look like in a fish farm? We've gotten pretty comfortable with the idea that there are positive and negative ways to farm on land; there are ways that are environmentally destructive, and there are ways which are in harmony with nature; so trying to take some of that schema of sustainable farming and think about it in terms of aquaculture is where I've directed my energy. It turns out a big issue is reducing the use of fish-meal or fish-oil in the diets of farmed fish. What I work on is basically fish nutrition and trying to solve what is essentially a biological problem of providing adequate nutrition for farmed fish without using fish-meal or fish-oil. I've worked with some plant-based feeds, and right now I work with farm-raised insects as an alternative nutrient source. Insects are great from a sustainability standpoint because they can be raised on organic waste streams, they have a low carbon footprint, and they're a way of recycling the waste byproducts of food production. The other thing I work on is reducing antibiotic use in farmed fish, which is another big ecological hazard.



Agrocybe Pediades, Common Fieldcap

Location: found around the same location as the above L. montanus, along the banks of Wyman Creek on September 28th, 2018.

Size: This mushroom is minuscule (~5 mm in diameter, and only about 1 cm high!)

Uses: A. Pediades is an edible mushroom, however, it is very small and easily confused with other little brown mushrooms that have the potential to be highly toxic, such as G. Marginata.

One of the things I didn't grasp fully until I came to Deep Springs was the way in which raising animals for food was originally not a luxury; it was a way of extracting edible food from an inhospitable landscape. In a desert environment like Deep Springs Valley, people can't eat sagebrush, but cows can, and people can eat cows and drink their milk. So this idea of using animal livestock as a way of bio-converting inedible resources into something that humans can access was something that I learned here, and has been broadly inspirational to me in the context of fish farming where we have twothirds of the earth's surface area is covered by its oceans, and all this salt water that would normally be an inaccessible resource for food production.

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Interview with Amity Wilczek

Sammy Bennis DS18

What brought you to the study of ecology?

I've always been something of a rambler, but also a sit-andwatcher. Some of my earliest memories are of spending hours playing with plants and creatures in the yard and also of finding all the paths through the local hedges that would take me to school. My family moved to



Agaricus Campestris, Pink Bottom

Location: This solitary mushroom was found in front of the larger Withrow houses around the main circle in early October 2018.

Size: This mushroom is about 2-3 centimeters across.

Uses: Pink Bottom mushrroms have a savory, meaty taste.

Santa Barbara when I was six, and during the seven years that we lived there I bet I spent more time outside than in. Even when I was reading, I had a special tree that I would climb up and sit in. Behind our house was a canyon with a young avocado and lemon orchard, but at the bottom was a wild creek. To this day I have no idea who owned the orchard, but they didn't seem to mind that I was in there all the time. (I left the fruit alone!) I love that creek so much, even though it has left me super sensitive to poison oak. On the far side of the canyon was a bluff that had shells fossilized in soft rock. We were miles from the ocean and quite a bit higher. I became so curious about how those marine creatures had gotten there... and when!

My interest in ecology really blossomed at the Mountain School. Kevin Mattingly, the wonderful science teacher there, inspired me. Field trips at the Mountain School were especially important, asking questions about the age of certain forest floor areas and other temporally wide-ranging ecological questions. He would let us sit with questions but encourage us along.



All this said, I originally pursued an undergraduate degree in math, but as I progressed I found that I was drifting farther away from the kind of mathematics that interested me. I had loved things like linear algebra and calculus that, to me, were more concrete. But it felt like the math I was doing at that time was becoming increasingly abstract. Those math skills have served me really well, however! Being able to think of problems in both abstract and concrete ways is essential.

Students taking the Wilderness First Responder class offered during 4-5 Break.

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Interview with Lee Talbot DS48

John Dewis DS94

Rumor has it that you authored the Endangered Species Act; an issue of the Newsletter devoted to Ecology at Deep Springs would not be complete without an interview with you, Lee.

I worked on endangered species quite a lot. First from 1954 to 1956 when I was staff ecologist of the International Union for Conservation based in Vienna. We traveled all over Asia from south to east and north to south. I wrote a book about that called *A Look at Threatened Species*. My wife Marty and I were environmental advisors to eleven southeast Asian governments at one point. When we first got acquainted, we spent over five years in the Serengeti in a tent. Then we organized the first international conference for ecology in southeast Asia.



Lee and Marty about 1960 in the Serengeti plains, East Africa, with a wildebeest they immobilized to examine and mark for migration studies.

The Head of the Smithsonian Dylan Ripley was there, and he offered the two of us positions at the Smithsonian in Washington—as he said, to bring the Smithsonian into the 20th century in terms of ecology and conversation. So, in 1966 we came back to Washington, and I was advisor to a joint Senate-House committee on the environment, which had been established because the grilling public concern led to letters from constituents to congressmen asking why they aren't doing something. Since most didn't know quite what the environment was, they set up this committee to look into what could be done.



Lee and Marty holding the Explorers Club flag in a previously unexplored part of the Annamite Mountains, Laos. The hills in the background are in Vietnam.

In 1970 Nixon sent a letter asking if the Smithsonian could lend me out for a year to start the President's Council on Environmental Quality; I spent the next eight years with three different presidents in this White House position. And I had an agenda: a greatly strengthened environmental Endangered Species Act. From the White House it was possible to make sure that the Department of the Interior did so by giving them my own outline of the need. When what they drafted came through, I took what they had done and worked with John Dingle in Congress and gave him my own version. The bill that he came out with included everything I had put into it! I had done it quietly and without any fanfare and interestingly it took about thirty years for people to realize that I'd actually written it. Dingle had a celebration out on the Hill at the 30th Anniversary of the Act and he introduced me as its author.

What did the bill include because of you that it otherwise would not have?

Purple: The Story of an Alien in the Desert

Austin Smith DS17

The following passage is an excerpt from a story second-year Austin Smith composed for his final for last semester's Field Biology class. The story explores what it would be like to experience the Valley for the first time, completely devoid of signification.

I awake alone in an unfamiliar place. It's unclear why it feels like I've just awoken though. I don't remember falling asleep recently, or rather I don't have any memories at all of falling asleep, but I know that I've slept many times in my life. I work my way back in time to recall how it is that I came to exist here. The images flash through my head: waving to my partner from the window of the capsule, seeing my home planet fade into the white specked but overall black background, crash landing on this small oval encircled by darkness. I remember my old planet as being very different from this one. Everything back there produced its own light and was made of regular geometrical shapes. I don't recognize any of what I'm experiencing here.



Coprinus Comatus, Shaggy Mane

Location: This solitary mushroom was also found in front of the larger Withrow houses around the main circle in early October 2018.

Size: This mushroom varies greatly in size, from almost 6 inches tall in the largest specimen to less than an inch in the smallest, recently budding one.

Uses: Shaggy Mane mushrooms are edible. Before it starts to turn black and rot, it is said to taste good, but once most of the mushroom becomes inky-black, most of the flavorful tissue has degraded.

The first thing in need of description is far away

from me and massive. I will label them as the edges of the ovular bowl I find myself in. The edges are jagged on top and overlay themselves on one another. They almost look like cracked concrete. At some places, they look like my hand made into a fist and pointed at me. In other places, they look like trapezoidal prisms, or simply beaten up triangles. What unifies these edges seems to exclusively be that they are Purple. Purple in their form perhaps, as if the way they express themselves is through the color purple. "Purple" is meant in two main senses. First, the edges of this bowl are purple in the same way that my capsule is, albeit much less overtly and totalizingly than the capsule's purple is. The only color defining the capsule is purple, whereas the bowl edges are also brown, and blue and gray, and perhaps even a little red in this sense of the word "purple." This capsule-like-purple in the bowl edges thus seems to arise when the edges melt together and create something unified that I can engage with. The other main way that purple is proper in describing the bowl edges is more metaphysical... I'm not sure that purple is the best articulation of this quality, but it's the word my mind can't quite think its way out of right now. I'm unsure what more to say about this second sense of the word purple... I'll come back to it.

On second thought, it's perhaps unfair to call them "bowl edges," because of how irregular and particular each part of the edge is. Different sections have different characteristics. The ones nearby appear vastly different than the ones that are far away. The ones up close have all sorts of intricate details. On them lie dirty-white bodies, sometimes much larger than me, with red or brown or green splotches scattered across their surface. These dirty-white bodies are incredibly numerous and sometimes stack on top of one another to dominate a wide area. I can also tell that the structure of the edges close by constantly folds in on itself, creating a seemingly random-yet-even texture. The edges far away are much more uniform in color and only appear to fold in on themselves on a large scale. On some edges green dots mark the uppermost points with a sort of softness.

Mitch Hunter Interview, Continued

Politically, this is just another slice of the unanswerable question about climate mitigation and adaptation: do we have the political will? In reality, how close we come to the technical ideal will depend on a number of factors: What trajectory will the world population take? (Happily, there are now a decent number of credible demographers who think that the FAO may be highly overestimating population growth, to the tune of about 1 billion people in 2050.) How much carbon can we store by improving degraded soils? Can McDonald's come up with a plant-based burger that's tastier and cheaper than commodity beef? Etc.

I'm a tempered optimist, so I think that we will get our act together enough to avoid the truly worst effects of climate change, and that agriculture will become more diverse, resilient, and environmentally benign along the way. I hope that we can manage some transformative positive change, but also expect that in many ways we'll muddle through and accommodate unpleasant tradeoffs.

This is perhaps a bleak question, but does the scope of the societal changes needed to avert climate catastrophe ever discourage you? If so, how do you work through that pessimism?

Yes. I think the first step is to recognize that there will always be ups and downs and try to embrace them both. My downs have always yielded to ups, so far. More broadly, I know that, for me, living a good life means trying to do what I can to find solutions for these problems, even while knowing that one person's efforts are completely inadequate. No one person can do it alone—Obama couldn't pass a climate bill, Trump can't build the wall—so it's OK if my contributions are incremental. It helps to surround yourself with others who are working for the same ends and to draw strength and inspiration and energy from them. Critically, that also makes it fun; voluntary martyrdom helps no one (spoken as a former voluntary labor martyr).

What is your favorite memory of Deep Springs?

That's an impossible question! The Death March, riding through Soldier Pass, naked Vision Quest hike into Eureka Valley, every time we went to the dunes, solo hiking Chocolate, Cow Camp trip our first week, walking back to the Cowboy House with Orion looking down after long nights in the saddle shop, rocking out to Cake and Prodigy on BH, boogies in the dairy barn and silo, MassageComm, marathon butchering sessions, cooking the odd bits at 2 in the morning with the past butchers, Keough hot springs before the first-years came, calving, seeing a UFO while calving (not joking), Thanksgiving meals, getting totally snowed in winter break of '04/'05, five minutes of silence... I'm bursting with more. Honestly, the best part was feeling like an indispensable part of a community of impressive people with a common purpose. That is hard, if not impossible, to find again. §

Jack Murphy Interview, Continued

Do you feel that your time at Deep Springs significantly contributed towards your decision to work in your field? If so, how?

Yes. At the very least, Deep Springs made me realize that it was okay to serve others; I came from a background in which selfishness was normal and expected. I had a latent spark of empathy that Deep Springs fanned. The intense experience with wilderness impacted me hugely, especially coming at the time in my life when I first felt truly free. Sorry, faculty, you will notice that I am not saying "my classes really turned me toward my present profession." Instead, the faculty at Deep Springs helped me become a better person. I still remember my outrage when one of the Schumans quoted the Greeks at me: "The law is your father and your mother." Holy cow, that caught my attention. How I disagreed! How I could not get that out of my head! Still can't! Thank you, Schumans!

Interview continued on following page.

What are some of your long-term goals with regards to your field of study?

Ha! I'm almost 60, so my long term goals have pretty much been accomplished, so that's good. I've taught thousands of students about climate change, biogeochemical cycling, the amazing environmental laws passed by the Nixon administration(!), the Basidiomycota, xylem and phloem, and mitosis, and suchlike. I've helped raise four kids into adulthood, one of whom went to Cornell (on his own merits! Really!) and did not go to Telluride. The other three are just as accomplished in their own way; I just mention Cornell and Telluride house because these are coins of your readership's realm. Anyhow, my laurels are starting to look pretty good to rest on. Nunn didn't say you had to serve humanity until you're in the grave, did he. Did he? Uh oh.

Anyway, there are thirteen acres of land in Oregon that I like to tend; I'm planting a lot of carbon-sucking trees there, and they're calling, as are the pre-settlement biological remnants that still live on that land. However, I am very much influenced by my wife Caroline, who, as a nurse and midwife, has directly served humanity way more than I have, and she may have other ideas about my "long term goals."

Anything else you'd like to share?

The original name of Mount Nunn is Mount Alfred. Several alumni from the late 1970's can attest to this. There is a metal plaque with Mount Alfred written on it, which was thrown from the peak when the Mount Nunn Naming Committee arrived there. Let me know if you ever find it. §

Geoff Pope Interview, Continued

What are some of the most interesting parts of your job?

To start with, the view of the earth from the air is breathtaking. Working with other people who are engaged in wildlife work is stimulating as well. I've learned a lot about concerns surrounding wildlife by talking with the people who fly with me. For a few years flying for Lighthawk took me to Southern Mexico and Guatemala, looking at a variety of issues. Every flight presents different problems to solve. And, of course, I like to fly airplanes.

How do you see your time as Ranch Manager of Deep Springs playing into your larger goals?

For a lot of my life working on cattle ranches was a primary goal. The opportunity to come to DS was especially fortunate because it combined cattle ranching with my more intellectual side and gave me the chance to live a life that was more expressive of who I am.

How do you see your work contributing to a life of service?

I consider that my 23 years at DS was one part of a life of service. Beyond that, I think my wildlife and natural resource work also contributes to making the world a better place. We are ruining our planet and I believe anything we can do to stem the tide is worthwhile work. §

Sam Laney Interview, Continued

Continued on page 27

In what ways is a career in oceanography service to humanity?

This is a good question and one I've thought about over the years. In retrospect it seems like I've allocated much of my professional and intellectual effort toward areas in oceanography where my specific skill sets can make a difference. My work in the Arctic and Antarctic is a good example. My particular combination of scientific and engi-

neering expertise is rather unusual in my field but it is exactly suited for developing innovative ways to measure and monitor polar ocean ecosystems. I find plenty of areas in oceanography interesting, but in only a subset of those can I see myself making a meaningful contribution to the field and that will benefit my colleagues and their own research. I think I decided early on to look for lines of inquiry that required someone willing to invest time and effort in areas that weren't so easy to study, that would open doors for others to follow later.

What is your favorite memory of Deep Springs?

Actually, I think my favorite memory of Deep Springs might come not from when I was a student but rather from one of the two times I returned to teach as a visiting professor. I remember one day when I was talking about the unit circle to student whose high school didn't do a good job of providing strong mathematics instruction. I was explaining how sines and cosines can be derived trigonometrically by considering the projection that the radius makes on the two Cartesian axes. I was just about to show that when you rotate the radius around the circle center, the subsequent changes in sine and cosine was just another way of describing sine waves in time when the light went off in his head, before I could deliver the punchline. He then said something like "You mean sine waves and circles are the same thing?" and I said yes. He then said something like, "That's beautiful," which was the perfect comment

James Hayden Interview, Continued

For me, the need to ask questions is partly for its own sake, but also an ethical matter. By asking questions and by giving attention to the little things that run the world, we honor, celebrate, and conserve them.

How has your time at Deep Springs influenced your approach to your current work?

It's all about "service." I've had a lot of privilege, so I ought to give back. I work for the State Government. I serve other people from eight o'clock to five o'clock, and my after-hours research serves the discipline of natural history and its objects, the little things. Nor do I mean to be condescending—I made a lot of silly mistakes and failures at Deep Springs, and I realize how fallible I can be. I'm a goofball just like everyone else.

Do you have a favorite species or subspecies of Lepidoptera?

How can I choose?! It comes and goes. I research something, then I lose interest in it after finishing the publication. Most of my interests are in the family Crambidae. Sufetula species (palm rootworms) are really diverse, with lots of undescribed species moving around in the global palm-tree trade, and I claim some credit for recognizing their distinctiveness. Penestola and Duponchelia "mud moths" are another neat group whose caterpillars live in coastal swamps. I did my dissertation on Odontiinae, which are more diverse in deserts than in Florida. This year, I want to discover the hosplant of our local species Microtheoris ophionalis—a big open question, but I predict they are feeding on the roots of Boraginaceae.

What was most memorable about your time at Deep Springs?

The environment: walking around at night and seeing the stars. Sure, it could be harsh, freezing my tail off writing papers in the old library. The other guys: long talks, long SB meetings, doing things together. I think every day when I cook about what I learned in the kitchen. I have lots of books on my shelves that I wanted to read at Deep Springs but never made the time. The environment at Deep Springs had no constraints, and everything was new and possible.

Nate Sibinga Interview, Continued

We can bio-convert some of the productivity of marine ecosystems into edible food, and I think that's a way desert ranch life has led me to fish farming.

Do you have any outstanding memories of the Valley that you'd care to share?

I tried to do an independent study with Robley Williams, who was a long-time friend of the College, and he had taught here many times after retiring from Vanderbilt University. His father was a colleague of Bob Aird, and had been a curricular consultant for Deep Springs in the 1960's and then became a Trustee during the 1970's, He was a microbiologist, and I proposed to him to do an independent study on the salt-tolerant bacteria living in the lake down at the end of the Valley. He thought this was an exciting project, so we got started on it: We went down to the lake and waded out to collect a bunch of mud samples that were going to culture. Our plan was to get a sense of the microbial ecology of that system, which is pretty weird and different. So, we collected these samples, and I started pouring them on to agar plates laced with lots of salt. Meanwhile, Robley had gone for a hike with some other people. He fell and he broke is hip and had to go to the hospital in an ambulance. While he was there, he had an embolism. This whole thing went badly very quickly for Robley. But he came back for the end-of-term dinner and asked me how my independent study had gone, and I said, "Well, I didn't really do it because you weren't here and I didn't know what to do." And he said, "Well it's an independent study; what did you think was going to happen?" I said, "Well I didn't know what you were expecting, and I don't have anything. So what should we do about this?" He said, "I think the best solution is a good, clean F. Because if I give you an incomplete, this will just hang over you. It's best to take the F and move on." §

Amity Wilczek Interview, Continued

So as my passion for pursuing math drifted off, I changed my major to biology, and I took a job working in one of the research greenhouses at the University of Chicago. Hard to resist the appeal of working in a warm place surrounded by life throughout those winters! There, I became specifically interested in plants.

My specific area of interest is in plants as organisms and looking at how their genetics enable them to adapt and respond to change in different climates—something that's useful for thinking about climate change.

What kind of research work have you done in the past?

The big set of experiments I was looking at immediately before I came to Deep Springs involved Mustard experiment—looking at different varieties of the same mustard species in different geographical regions to anticipate the effects of climate change on plant growth and looking at the genetic triggers.

One of my favorite parts of this was not only that it was important research that has a lasting legacy, but also that I got to work with a wide variety of scientists who normally don't speak to each other all that much—people with different tool-kits but often big areas of shared interest. Microbiologists, Agronomists, etc.

What drew you to Deep Springs?

Especially the kind of learning that can be done when everyone in the community is so involved in the growth and existence of plant life around here, and where we depend on it so directly. I originally heard about it at the Mountain School and I hoped to find a similar sense of community.

Coliform Fecal Bacteria in waterways in some of our allotments were particularly high when measured by the "local" (South Tahoe Lake) water authorities, and because we had very little information on the way water flow works around here (very different from the Sierras), we had little information about what that meant in context.

Eventually we found that after less than a week after the cows had left the area, the counts returned to pre-cow levels. Great for us, but also an interesting and informative pursuit in getting to know the Valley around us. Another less "plant-ecological" but certainly important to human ecology research project I carried out here in 2010-2011 was an analysis of the admissions data of the previous ten years to find out what exactly it is that we select for. Found multiple interesting results, although because we're so small it's difficult to draw significant conclusions even from ten years of data. One was that students with higher test scores were significantly more likely to get into the second round. Another was the selection of private students—although the general impression is that it's an equal distribution, we actually get twice as many applicants from public schools so the equal distribution in admission is actually misleading. One thing that I've noticed here anecdotally is the rising number of transfer students we admit—time for another statistical analysis! §

Lee Talbot Interview, Continued

Lots of things: critical habitat, requiring that agencies cooperate, that if agencies were likely to impact endangered species they had to consult with the Department of the Interior and the Department of Commerce (for marine species), money to help states so they could set up their own programs, listing what we mean by protecting species, and what are the actions that constitute threats to them. The important thing is that it's not just "killing" but affecting the habitat and thinking of disturbance in this way. I also clearly stated that it was the policy of our country to protect endangered species and keep them from extinction.

Did your work enjoy bipartisan support?

It received complete bipartisan support. It was 1973, and back then both sides in Congress, Democrats and Republicans, worked together. I had worked with both sides at the Smithsonian, so when I took the White House job the first thing I did was go to Bob Haldeman, because the Senate and House were Democrat majorities, but the Administration was Republican. We had to have Democratic support if we were to get through any of our policies, so I asked Bob if it was alright if I worked with both sides, and he said, "Yes, Lee do whatever you need to do, just don't ever appear on the front page of The Washington Post!"

I used to have these meetings both Democrat and Republican staff members and the only real interest was, "What can we do that will help the United States most." Some people call this the "Golden Age" because for several years everyone worked together. All of these things were passed unanimously. It wasn't about sticking your finger in the eye of the other side; it was what can we do that helps the country most. It was a privilege to work with this Congress because you could get a lot done.

Lee, what's happened to our government and how can we fix it?

Since Reagan that amity has gone to hell. What we want to see is a return to a situation where what's good for the country is what matters and not what scores points over my political opposition. So, one thing people can do is make sure to vote for people whose standards are good for the country, not political. Another big thing obviously is trying to stop and reverse the CO2 greenhouse gas emissions which means again taking the environment seriously. I find it almost unbelievable that our President insists on saying that it's all a hoax. This morning in the Post there

was an editorial talking about the increasing agreement on climate change, and it talked about the public, not just Democrats, and big corporations including energy companies who are planning on working towards dealing with climate change. In other words, if there is nearly 100% agreement among world scientists that global change is due to human activities, then this can all still happen without the support of the President and few hardliners. Hopefully we will see more of that, and Congress will come along that line.

Any lessons from the Valley that have been of use to you in your work and life?



Students look on as branding begins.

One that is less direct on ecology but very important has to do with self-government, because it was, and I think still is, one third of what the students do. I learned a lot about how you develop support and backing from people and from that whole side of the education at Deep Springs. This lesson meant that when I went to UC Berkeley, in less than one semester I had been appointed to the governing council of the Student Body and was re-elected the whole time I was there. The experience with governance and policy at Deep Springs has also stood me in good stead ever since: every job I've ever had has had a fair amount of policy work or working with government.

And, how do you get "support and backing"?

You find positions that are of benefit to the other side as well as your own. A win-win situation is hard to argue against, and you will not get very far if you stick with your position only. But if you recast your issue to be of benefit to the others you have an almost certain win.

How did you and your wife Marty meet?

We were both at the Smithsonian together and have collaborated a great deal and published articles and books together. Marty worked with me in Southeast Asia. In each country we would meet the Head of State and would then go out and spend time in the country. These were nations not yet committed to industry, and we helped a number of them start National Park systems and Wildlife Conservancies. At that time you have to realize women were sort of second class in a number of these countries, but the fact that Marty was a full partner with me and got to the top of the mountains faster than any of the rest of us had a really big impact on the people there and the women especially.

Before I met her, Marty and another Vassar graduate started the Student Conservation Association. They'd bring seven thousand or more volunteers to work in National Parks and protected areas each year. It's still going strong and regarded as the most effective source of volunteer support for the Parks. A big percentage of Parks Service employees were introduced to our National Parks in this program.

Do you still hike?

Well I'm eighty-six and Marty's eighty-eight and we do okay! Every summer of our lives we've hiked in the Sierras on the east side of them, and we've climbed all over the world, in the Himalayas, over 18,000 feet in Bhutan, and our boys are both climbers. She's gone off just now to go swimming with one of them. Today is our 60th anniversary. We've had a fantastic life.

Purple, Continued

Student Body Wishlist

Sewing Machine

Ping Pong Balls

Aux Cords

Rubber Boots

Mid-Fire Clay

Work Gloves

Soccer Balls

Baseball Bats, Gloves, Balls

Magazine and Newspaper Sub-

scriptions (specifically NYT, Paris

Review of Books, N+1 Magazine)

Other ones have a darker, more free-form side and a lighter, cleaner side. I can follow along the top of the bowl edge and experience it as a rugged but continuous border line. If I zoom out, though, the edges appear to be hopelessly particular and a continuous body on by coincidence. Either way, it all seems Purple.

Above me, is a blue gaseous looking thing. I find it uninspiring. Much more tantalizing is the body seemingly floating above the bowl edges to my right. Each time that I try to look at it I can't help but flinch away from pain. From my failed attempts as study, I can tell that it has a center circle, blue perhaps. An uneven profusion of something yellowish completely surrounds this center. Whatever the yellowish something is, it seems to be coming all the way to me, hurting my eyes when it makes contact. I don't know how it's doing what it's doing. When I orient my eyelashes towards it without looking at it directly, it exposes my eyelashes as multi-colored. It must have some power over color, but I'm not sure what that power is or how it works. I'll call it "the yellow orb."

I shift now to looking down, to what is closer. It at first appears to be one mess of bodies that are quite uniform, but as soon as I focus in, I realize how varying, irregular, and disjointed it all is. I'm not sure where to begin. The will to truth is inescapable and insatiable right now but failure seem inevitable.

Confused, I look out across all of what is below me. I can tell that the bodies existing nearby extend as far as I can see so I begin walking, curious if this planet is as uniform as it seems. I find myself looking up towards the bowl edges again and again, but I always make sure to pull my mind back to things that are new and that can help me on my path towards Truth. §

Deep Springs' New Website

Townes Nelson DS17

Over the past year and a half, the Communications Committee has been redesigning Deep Springs' website. The Committee hoped to resolve the redundancies and unintuitive organizational structures of the previous website, and to better reflect daily life in the Valley. After extensive work and conversation within the Committee, consulting the broader community and class chairs for feedback, and a few unexpected delays, ComCom is excited to debut the new website design. Thank you to everyone who helped make this project possible. Visit deepsprings.edu to see the updated website. §



Building Committee Update

Padraic Macleish DS99, Director of Operations and Mechanic

After a century of faithful service, it is nearly time to bid farewell to the Boarding House. Originally constructed in 1920, the dining hall and apartment buildings first shared the "Gray Porch," which was eventually enclosed and now serves as the baker's room, providing a continuous space that unites the two structures. While a number of challenges prompted the College to examine a renovation, seismic concerns necessitated a complete rebuild. The original buildings were constructed of stacked rock on dirt, with no foundation. After investigating a variety of methods that could help the building meet current codes, it was determined that the only feasible approach was a complete rebuild.

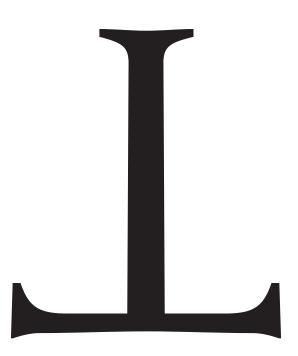
That project is currently approaching construction documentation phase, in which the details of the building are finalized and documented to provide the necessary information for contractors to bid on the project. Thanks to several very generous gifts, the College expects to begin work in late 2019 or early 2020.

The Deep Springs Building Committee currently consists of two students, Rory O'Hollaren (DS18) and Schuyler Curriden (DS17); two members of the Board, David Welle (DS80) and Eric Swanson (DS65); and Director of Operations Padraic MacLeish (DS99). This committee has steered the design and planning process for the reconstruction of the new Boarding House. Drawing upon extensive consultation within the community and input from alumni and board members, the Building Committee looks forward to a building that features the best elements of our beloved BH updated and renewed for the 21st century. The new Boarding House will feature a slightly larger and more logically laid-out food preparation space with room for cooking and teaching. The dining room will also be enlarged to allow for a separate committee dining area for meetings over meals and a lounge space to maintain the homey atmosphere students are familiar with in the existing building.

Recent gifts by alumnus Bill vanden Heuvel (DS46) and his daughters Katrina and Wendy will also allow Deep Springs to construct additional faculty housing around the Main Circle. The need for extended faculty housing has existed for some time, with limited space available for short-term professors when all of the long-term faculty positions are filled. The need will be especially acute considering the the loss of the Boarding House Apartment when that building is demolished and rebuilt.

The new Boarding House will provide even more opportunities to share home-cooked meals prepared by student cooks, bakers, and butchers, and increased housing will widen the college's prospective faculty pool. The combination of these two projects will provide a strong start to a second century of education at Deep Springs. §





Thank you to everyone who made this newsletter possible, particularly all the community members who agreed to be interviewed or who allowed their writing to be included in the issue. We are grateful for your effort, time, and interest.

Note: Many interviews were edited for length and clarity.

Deep Springs Communications Committee Sammy, Trinity, Aadit, Padraic, John, and Townes