Interview with Steve Botti
by Max Schwartz

Steve at his retirement party, 2007

One of the questions we ask in these interviews is "Are great leaders born or made?" Of course, for most people, the answer isn't that simple. Being born with the right qualities doesn't guarantee you anything; on the flip side, being in the right place at the right time just makes you lucky - great leaders shape the circumstances around them. Though Steve Botti might protest, his career in fire management has exemplified the combination of leadership talent and excellent timing. Throughout his career, Steve has found himself in highly opportune circumstances: coming to Sequoia and Kings Canyon National Park just as legendary figures like Bruce Kilgore and Dr. Harold Biswell were developing new prescribed fire policies; joining the Park Service's national fire management office just before the tidal changes brought on by the 1988 Yellowstone fires. But Steve has taken those opportunities and shaped them himself: taking what he learned at Sequoia and using it to develop an ecological fire management program at Yosemite National Park, for example. When talking about his career, Steve told me, "One thing just led to another...and the rest, as they say, is history." But when you talk about ecological fire management in the National Parks, much of the story is Steve's.

Steve began his natural resources career with a temporary position on a forestry crew in Sequoia National Park in 1971. He was coming to Sequoia at an auspicious time for fire ecology; Bruce Kilgore was just beginning the Park's prescribed fire program. "I got to meet Bruce, and the people who worked for him," Steve said. "It really interested me, the way these people were looking at fire in a completely new way." At Sequoia, he worked not only with fire management, but also natural resources management; work he continued after his employment at Sequoia ended in 1973 and he moved to Yosemite National Park.

At Yosemite, Steve focused on natural resources, though this did not prevent him from working with fire management as well. "Fire management, at least the ecological part of fire management, was a subset of natural resources management. All of the science was being implemented by natural resource managers," Steve explained. In this capacity, Steve used the innovative ideas
being developed around him - as well as innovative thinking of his own - to help implement a prescribed fire and fuels management program within Yosemite. For the next 15 years, Steve would be an integral force for ecological fire management at Yosemite and other national parks.

Also while at Yosemite, Steve began a project which would follow him long after he had left the Park and moved to the Boise Interagency Fire Center (the previous incarnation of our National Interagency Fire Center, or NIFC) in 1988. When Steve came to Yosemite, the current edition of the botany field guide was horribly out of date, having been published over 70 years earlier. Steve decided that he would create a new guide, and 20 years of creative evolution later, "An Illustrated Flora of Yosemite National Park" was finished. Steve's guide is renowned not only for its comprehensive treatment of Yosemite's unique and diverse plant life, but also its beautiful water-colored renderings of that plant life, produced by his partner Walter Sydoriak. The book has been described not only as an all-inclusive guide, but also as an "art statement" of Yosemite.

Continuing that excellent sense of timing, Steve came to NIFC just in advance of the devastating fires in Yellowstone National Park. "When I arrived in the winter of 1988, there were only about 10 people working in the office," Steve said. "At that time, I was responsible for an umbrella of tasks, which included all the planning and budgeting tasks, preparedness issues, the fuels program, public outreach, prevention, information and technology issues, and training." The tidal wave of changes brought about by Yellowstone '88 and its reverberations would change that, as the Park Service's fire management program exploded in size and complexity. Though Steve might demur from taking any credit, Paul Broyles, a coworker during Steve's 19 years at NIFC, said, "Steve has been uniquely responsible for the growth, both in magnitude and complexity, of the NPS fire program from an infant program of $4.5 million in 1988 to a very robust and mature program of over $100 million today. The National Park Service owes Steve an inordinate degree of gratitude for his relentless and successful efforts."

During his time with the Park Service at NIFC, Steve helped to create and sustain many of the fundamental aspects of the fire management program, including the Wildland Fire Use and Hazardous Fuels Reduction programs, the Fire Ecologist program, Burned Area Emergency Response and the Wildland Urban Interface program. He also helped to write many major fire policy documents, including the 1995 and 2001 policies and the National Fire Plan, while working tirelessly both in Boise and Washington to promote fire management.

After his retirement, Steve moved to Stanley Idaho, though he is often found back in Boise, both to satisfy his golfing hobby and to provide his experience and expertise to the Park Service on a number of projects. I interviewed Steve in the fall of 2007 at his home in Stanley.

So how do you think your experiences in the beginning of your career at Sequoia and Yosemite affected how you viewed prescribed fire and fire management as you moved through your career?

At that time, the scientific basis for what we call fire ecology, including prescribed fire and prescribed natural fire - Wildland Fire Use - those concepts were just being developed and explored. Sequoia, and after that Yosemite, were great places to be working on those issues. Both places had people there who were very interested in fire use, and I learned from them, Bruce Kilgore and Harold Biswell especially. Professor Biswell was at UC Berkeley, a Professor of Botany, and later Forestry; he was the one who pioneered a lot of the techniques of prescribed fire and really pushed it along from an academic and scientific standpoint. I got exposed to this new science of fire ecology through these men and learned from their ideas. I ended up being more an intermediary - they were doing the hard scientific research, and I wasn't in a position to do that - but I was assisting them, and taking those ideas and helping to implement them on a broader scale.

Of course, no one imagined prescribed fire the way we do it today, where we burn hundreds of thousands of acres a year. People could not imagine that at the time. That was where I fit in, thinking, "How would we take these scientific ideas, expand on them, flesh them out and bring them into a managerial context, so it wasn't just academic."

What types of experiences, would you say affected you, your career and how you worked? I'm thinking here of both positive and negative experiences.

What we were doing in those early days was very controversial, so there were definitely some people who were very opposed to the scientific concept of fire. It was not an easy situation, but I learned a lot from dealing with them about how to change ideas, how to get past opposition and institutional inertia. On the positive side, there were these role models - the men I mentioned before - people who were willing to explore these heretical ideas. I learned from them, too, about how to affect change; how do you articulate the need for it and how you overcome opposition to it.
I think leadership leads into that: leadership is about more than being able to articulate goals and objectives. Leadership is also about developing followers and convincing people, inspiring them to believe in your goals and objectives. I learned these lessons by studying these early pioneers and saying, "How did you go about doing this?" It's not a linear thing; it wasn't as simple as just saying, "The science says that fire is good for the giant sequoia trees," which is kind of where it started in the Sierra Nevadas. And it isn't enough to believe in yourself - you have to make other people believe as well, both those people within your organization and the broader public.

What do you see as your greatest strength? Correspondingly, what do you consider your greatest weaknesses?

It's always hard to talk about those types of things without seeming egotistical; it's hard to evaluate yourself. I do think I have the ability to analyze problems in a broad holistic way, and connect things together. Even when these ideas are from different fields I've been able to weave those things together as a synthesis. I have a talent for viewing problems broadly rather than narrowly. In a sense that may also be a weakness, seeing every facet of a problem. I admire people who can focus very narrowly on something, dig really deeply into it and analyze it. I tend to analyze things more broadly, though that can be very effective in establishing a context for a problem, which helps me to explain that problem to others. So maybe that's one of my strengths.

Also, I can connect to people; I think I can understand people's motivations and desires and viewpoints pretty well. On the weakness side I think sometimes I get spread a little too thin because of my preference for a broad view. Perhaps I should have focused a little more rather than getting distracted by the big picture. I've done a lot of work in botany, some is very technical, I've written papers about economics, about fire economics, and about fire ecology. I look at a lot of different things, and maybe that's a strength and maybe that's also a weakness; maybe I could have done more if I had focused a little more at times.

What makes a good leader? What do you see in someone that makes you say, "That is someone who I would follow?"

I think I can best answer this by talking about my philosophy of leadership. In my mind, I draw a distinction between two different types of personalities: what I call command and control personalities and leadership personalities. I think a lot of people mix together those groups of traits inappropriately. People sometimes confuse the person with the position. I don't think that leaders lead by virtue of their office; people who truly lead, their power or their influence comes from other means. It has to do with their ability to have a vision, to be able to articulate that vision and to inspire others to believe in that and want to follow it. Sometimes they hold an office or a rank, sometimes not. Also, a leader has to have followers - otherwise you're just sitting out there by yourself in the woods somewhere. You could have the best ideas in the world, but if you can't make something happen, you're not a leader. A leader needs to be able to articulate his or her goals and objectives; that's really tied up in vision: what is it that you're leading people toward. Those are the most important traits for leaders.

There are other important traits as well, though not as important in my mind as ability to communicate a vision. One is integrity. You can be an effective leader in the short run while lacking integrity, but eventually you will be sidetracked without it. The Greeks would call it a tragic flaw - a person can have a vision and articulate it, but eventually people will see that this person's actions do not fit with his vision, and he will lose his followers. But that is still a secondary thing.

As for the kind of person I would follow, there has to be this vision, combined with a focus on goals and objectives. We need to be talking about something that can be achieved one way or another. It could be social or scientific or political objectives, but there has to be something out there that is being achieved.

What are the "lessons learned" that you would try to pass on about leadership?

As I look back on things, one of the most important pieces of my intellectual development was that I learned early on to be a skeptic. I believe that skepticism is one of the most important traits. It has to do with these changing paradigms; the people who tend to resist the paradigm change are people who are not skeptical. They are very comfortable with things as they are; they accept the narrow traditional view. Those people don't often develop into leaders; leaders need to be able to see beyond the current paradigm to how things could possibly be done differently.

Now, by saying that I don't mean that you should reject things out of hand, I just mean that you should think about the way things are a little more deeply. I can think of a few examples. In my early days, growing up in the south in the 50s and 60s, there were still a lot of cultural difficulties, and certainly racism was a huge problem. It was the prevailing paradigm, accepted even by the nice people. I learned at an early age to be skeptical of that - I don't know how exactly, but I did - and I learned a lesson from those experiences. That lesson really formed my thinking about a lot of issues in fire management, even though it might not seem that the
two are well connected. I was skeptical early on about putting out all fires - the 10:00am policy - trying to make nature do whatever we want. I remember hearing a regional fire director in the Forest Service say in the 1980s that, given enough money and resources, we could be 100 percent successful in suppression. I just couldn't see how that could ever be achieved. So that's one of the lessons: to be questioning of the prevailing viewpoints, or even of the political-institutional structures.

I remember reading something a long time ago, studies trying to find commonalities between those people who defied the Nazis and hid Jews during the Holocaust. When the researchers looked, they couldn't find any common theme having to do with, wealth, education or social status. What they eventually found was that these people tended to be very skeptical of authority. They tended to be very independent thinkers, and so they were willing to take a very independent or risky tack to life. I think that there are two lessons there: first of course is about the importance of skepticism, but I think another was one that I perceived much later. That lesson was about how to nurture an idea in a hostile environment. The people helping the Jewish underground knew that what was happening around them was incorrect, but they also knew that to overtly challenge the power structure would have been the end of them. There is a lesson here about leadership: there are times when you can be very overt about challenging certain ideas, and there are times when you can't be. So you have to learn to be both persuasive and diplomatic in communicating your ideas, and change paradigms subtly.

You talk a lot about leadership as a collection of certain qualities that people have. Do you think that those qualities are innate within a person and if you have them you can be a leader and if you don't you can't? Can a leader be made, or only born?

I tend to believe that there are two factors at work there. Some of it is innate - you have to be born with some of those traits which can then be developed. Of course, the key there is "can be developed." Some people say that you are a "born leader," but just because you're born with the capability to be a leader doesn't necessarily mean that you're going to be one. Frankly, a lot of this depends on circumstances. You can be born with all the right traits, but that doesn't mean that circumstances are going to arise that are going to allow you to achieve anything.

One of the most effective leaders that I see on the scene right now and a good example of role that circumstance plays in leadership would be somebody like the Dalai Lama. He's a person who has all of these traits, but if the circumstances had been different, we wouldn't even know who he is. The reason he has become a world leader is because of the political circumstances that forced him out of his narrow role; he was the spiritual leader of an esoteric group of Buddhist monks in Tibet. Politics forced him onto the international stage and it turned out that he had this vision that turned out to be broader than just the role he had in Tibet. By articulating that broad vision, he made himself a world leader.

Getting back to the question, it's kind of a combination, the way I see it, a leader needs both natural qualities and the help of outside forces. Some of it can be happenstance or accidents of history, like that example. It's not all just innate qualities. You're not predestined to be a world leader - or any leader - there's chance and circumstance involved.

What is the biggest change you've seen in fire management since the start of your career?

Since I started in 1971, the biggest change is that we're now taking a much more holistic view of fire management. Fire is a very complex and multifaceted problem, which is one of the things that always attracted me to it. The traditional facet is the protection of life and property, the emergency response. That aspect attracts a certain kind of person - people who perhaps have different personality traits and a different way of looking at problems from myself. Of course that aspect of fire management, and the people attracted to that aspect, is very important, but one of the biggest improvements I've seen is the rise of scientific and ecological dimension of fire. It was always there and some people tinkered with it many many decades ago, but it was never a driving force of how we did things. Now it is, and that has all come about during my career.

I would call this change a paradigm shift; it signaled a new direction in the way we think about problems and how we manage them. Like most things, it didn't come about easily. This shift took at least 25-30 years to really move from the old prevailing view - the emergency
management and protection of property view - of fire management to this new view.

As I said, it wasn't easy to get here. We had to convince people not only within fire management, but also the broader public. You had the Park superintendents and other land managers who were comfortable with the status quo, and worried about how change would affect their careers, how they would be affected if something went wrong - they needed to be convinced that the new paradigm was right. Beyond them you had the broader public, who was resistant to using the National Parks as research laboratories; to the public, the Parks - especially Yosemite - are more like sacrosanct temples. So they needed to be taught that some tinkering with the Parks was necessary to make a better approach to fire management. That was very difficult, which is why the shift has taken so long.

On the flip side, this paradigm shift has created the possibility for a counterrevolution. There's always been a reactionary element to fire management, because there is this tension between the command and control/emergency services view of fire and the scientific/ecological view. You have people coming at the problems of fire from two different directions. Because of what's happened in the last six or seven years, because of all the massively destructive fire seasons we've been having, this reactionary element is winning the current battle, or at least gaining ascendancy. Once again people are saying that the primary view should be dealing with the emergency element of fire management. Emergency management is critical, but it doesn't address the underlying problems inherent in the current fire management situation. So really it's a shortsighted view, a view that will in the long run not succeed. People are saying, "We have got to protect life and property, and we have to stop these catastrophic wildfires, and we need to throw a lot of money and resources at them."

That's mindset only addresses half the problem; I see it as steering to avoid the 10 percent of an iceberg visible above the water while ignoring the 90 percent beneath the surface. Of course, that's not to say that it's not a problem that has to be dealt with, but I don't see it as the most pressing one. We need to confront these changes, however, without reverting to modes of thinking that did not work in the past. And the funny thing is that no one disputes that these modes of thinking failed us in the past, but the current pressures are such that people are going back to them. And what that tells me is that the gains we have made in fire management over the past 30 years are not yet institutionalized; they are still fragile. The fire program can only be effective in the long-run by strengthening the current program balance between emergency response and the newer science of fire ecology.

What do you think needs to be done to make those gains permanent?

That's a really difficult question to answer. I'm not sure that there is a quick fix. What we need is some very effective leaders who understand the problems and can articulate the solutions in a better way than we have so far seen. Part of this is a very obvious and sort of deep seated political problem. The view of Congress and the current administration and the public tends to be on the short term, which is understandable to a certain extent - we have a big problem and we need to fix it now or at least as soon as possible. The scientific view tends to be very long term. And the problem is that a lot of current problems of fire aren't going to be fixed for decades. You hear about this; it's not something that's hidden, but I think the public and the politicians need to believe that there is no quick fix.

So that gets back to the need for new leadership. Where are the people who can articulate the new paradigm and convince the public and political leaders that we need to stick with it? There will be difficult times ahead; we created this problem over decades - or at least we partially created it - but it took decades for this problem to be manifested the way it is now, and it's going to take decades to solve it. How do we get there?

What do you think about generational change? After all, fire management as a group is a graying group. Could a generational shift be part of the solution?

I think that's definitely part of what we'll see happen. But it's not going to be a straight line kind of thing. Certainly some of the decision-makers of my generation will have to go away for these changes to really become institutionalized. I use decision-makers purposefully here; the leaders, as I define them, will be at the forefront of institutionalizing these changes. I think it's a lot easier for people of your generation coming up to understand this new paradigm; after all, it's being taught in universities as scientific fact. So people are growing up accepting a lot of the ideas that were very heretical 30 years ago. For example, the idea that you could have lightning fires burning in wilderness areas and they could get very large and just burn for all summer; the first time that idea was put forward, it was like you were talking about something totally incomprehensible. Now it isn't, it's accepted, and that's probably a good thing.

On the other hand, the reason I don't think it will really be a linear type of change is that there are still a lot of people coming in to fire management who only have this command and control view of the world. Those people often succeed in organizations like fire management; they often rise to positions of authority faster than people who may have a more analytical viewpoint. Some of
those people are still going to be resistant to this ecological type of fire management, which stresses the limitations on our ability to command and control fire and make it do what we want. So there will still be a lot of tension in fire management, because this command and control mindset is not limited to my generation - though it may be minimized in the generations that follow me.

What do you see is the biggest policy challenge facing fire management? For example, I think of WUI, of climate change...

I think that all the basic ideas of fire management are in play right now - at least that I can see. That isn't to say that there won't be some shift in policy that I haven't seen coming. But I do think that things like climate change will have to be explored a lot more thoroughly as far as their relation to fire policy. I don't see it being revolutionary - it's merely a nuance. We'll still be faced with similar types of policy challenges, such as role of fires in ecosystems and how we will live with fire. It will require a lot more research to see how climate change will affect our current situation, but I don't think that it will overthrow anything that we know already. From a policy standpoint, we're still going to have to suppress unwanted wildland fire and we're still going to keep fire where it has a beneficial influence. Those two things are the foundations that will always be here. As I mentioned before, it is finding the balance between those two missions that is our major challenge. Climate change merely affects how we reach that balance.

The Wildland Urban Interface, and its growth, is a similar issue. We understand it and we understand how it constrains our ability to manage fire in certain ways. We're going to have to continue to refine our understanding, of course, especially as the WUI continues to grow. I don't think we'll ever find a "solution" to the problem of the WUI's growth, we'll just find ways to better manage it, and to better live with it. Once again it's a question of balance. So I think that finding that balance is our greatest policy challenge.

Partially that is complicated by that reactionary element I discussed before. When we first started to undo the old suppression paradigm and started to put fire back on the landscape, we opened ourselves up to a reaction - a reaction we see now especially. Some fire managers are saying that they can't use WFU because the growth of the WUI has made it too dangerous. It's not that managers are questioning the science, but they are questioning how the science can be used in such a difficult political and social environment. On the other side, the academics, the ecologists are pushing back as well, saying that we know we can't control nature and we need to learn to live with it. And there is the issue that leaders need to confront - to find that balance.

Another problem I see that will have to be resolved is the issue of accountability, and that accountability seems to drive a lot of what we do. The costs of fire management are really increasing - we're putting so many more people and resources into what we do, and with that comes more cost and a lot more scrutiny. The public perception is that we aren't solving the problem that they are paying us a whole lot of money to solve; instead, the problem is getting a lot worse. So this issue is overarching across everything else that we've talked about, that we need to show the public that we can implement cost effective and successful strategies. If we can't do that for our core audiences, all of these questions of balance between the new and old methods of fire management will be moot - so even though accountability is not a challenge like WUI or climate change, it is still vitally important for fire management.

This interview with Steve Botti was conducted in Stanley, Idaho on August 29th 2007 by Max Schwartz.