

# 2011

## San Juan IHC End of Season Report



San Juan Hotshots  
USDA Forest Service  
15 Burnett Court  
Durango, Colorado 81301



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## *2011 San Juan IHC Roster*

*Jay Godson  
Lance Martin  
Jacob Birdsell  
Keith Bedonie  
Clay Yazzie  
Scott McCreary  
Nate Christiansen  
Jenna Beckerman  
John Cordes  
Tyler West  
Andrea Drinkhouse  
Nate Giles  
Devin Shannon  
Ryan Corman  
Scott De Velder  
Jeff Fitzwater  
Quito Justice  
Matt Rayes  
Lew Sovocool*



## *Overview*

San Juan IHC is one of ninety-three interagency hotshot crews committed to suppressing the nation's wildland fires, supporting a variety of resource benefit projects, as well as occasionally aiding in disaster relief efforts. The crew is typically comprised of twenty men and women hailing from all parts of the United States. The crew got its start in 2002 and calls Durango, Colorado and the San Juan National Forest their home.





## *Hiring*

The 2011 season began with many fresh faces in new positions. Both the overhead and the seasonal employees experienced quite a bit of change. Beginning with the overhead, Jay Godson officially accepted the superintendent position after Jim Cornelius moved on to a FMO position in Missouri. Leaving the foreman position vacant, Lance Martin then officially accepted this position in April. With Lance as the new foreman, this left the saw boss position open. This was filled with two detailers. Clay Yazzie, a San Juan IHC alumni and current McCall Smokejumper, was the first to fill the position until mid season. Accepting the duty for the remainder of the season was Nate Christiansen, who normally is the lead crewmember for the saw squad. Also new to the overhead was Jenna Beckerman, from Craig, Colorado, who accepted a lead crewmember position in February.



The seasonal employees welcomed five new hires for the year. They all came with fire experience already under their belts, most of which stemming from previous hotshot crew experience. We also had several detailers come to help us throughout the year, one of which, Lew Sovocool, who came from one of the nation's Veteran Green crews, stayed with us the entire year.

### *2011 Detailers*

*Lew Sovocool*

*Sam Kelly*

*David Draayer*

*Ross Schumaker*

*Zach Freundlich*

*Montana Madsen*

*Brandon Range*

*Ben McCrary*





## *Assignments*

The crew began the season on April 11, 2011 and ended on September 22, 2011, 165 days in all. Of those 165 days, 85 were spent on fire assignments, 18 were spent travelling, 18 on project work, 27 were station days, 11 were unavailable days off, and finally, 10 were available days off. By the time the seasonal crewmembers were laid off in September, 923 hours of overtime were accrued. Also in this time we managed to drive approximately 14,000 miles across five different states and consumed approximately 1,640 MREs, which works out to be about 82 MREs per person. That's a lot of Spicy Penne Pasta.



The fire assignments San Juan IHC responded to this season encompassed a wide range of fuel types and suppression techniques. We were lucky, however, and spent a lot of our time in high elevation areas which meant less time in the sweltering grass and Pinion/Juniper lowlands and much more time in the temperate timber stands, although that did mean waking up to snow on occasion. Even our dispatch to Southern Arizona was spent in the much more pleasant Ponderosa Pine stands of the Chiricahas. For the majority of our assignments, however, we stayed in our own Region Two, travelling to only three fires outside of Colorado and Wyoming. We also spent quite a bit of time on our own district aiding with initial attack incidents.



Our fire assignments also allowed us to experience a wide range of suppression techniques, from full suppression to "letting it burn" for resource benefit, and we did everything in between it seemed. While full suppression techniques are what hotshot crews excel at, our time on the Duckett (Pike National Forest, Colorado), Feather (Gila National Forest, New Mexico), Norton Point (Shoshone National Forest, Wyoming), and Reservoir (Big Horn National Forest, Wyoming) fires added to our experience in supporting resource benefit fires.





## 2011 Fire Incidents

<i>Fire Name</i>	<i>Location</i>	<i>Number of Shifts</i>
Sand Gulch	Colorado	9
Snyder Creek	Colorado	3
Horseshoe	Arizona	14
Shell	Colorado	2
Mesa de Maya	Colorado	1
Duckett*	Colorado	18
Feather	New Mexico	5
Cracker	Colorado	1
Trail Canyon	Colorado	2
Canyon	Colorado	1
Chapparal	Utah	3
Redding	Colorado	3
Beaver Creek	Colorado	2
Norton Point*	Wyoming	4
Paintrock	Wyoming	2
Christnick	Wyoming	3
Reservoir	Wyoming	4

\*indicates there were multiple dispatches to this incident





## *Vehicles*

This year San Juan IHC operated with four vehicles: the Supt truck, a Ford F-550, two International Crew Carriers (Buggies), and one chase truck, a Chevy 3500. All of the vehicles managed to survive the 14,000 miles we drove with relatively few break downs. They all did experience minor issues, such as the AC units of both Buggies going out, but the only major problems were experienced by the 5170 Buggy, which had to be towed off the hill in Wyoming due to a faulty crankshaft position sensor, and the chase truck, which had to visit the auto mechanic in Greybull, Wyoming, due to broken U-joints on the drive shaft. Luckily, the crew had no lost time due to either of these break downs. There were also no vehicle accidents or close calls while driving this season.



## *Training*

Training is a very important aspect of San Juan IHC's commitment to developing well rounded firefighters. It begins with the crew's Critical 80 training at the first of the season, a two week period in which both crewmembers and overhead refresh their minds and bodies to prepare for the upcoming fire season through classroom lessons and physical training. However, training doesn't end there for the crew, whenever possible during downtime between fires and project work the crew tries to teach NWCG courses for crewmembers. This year we were able to teach S-200 Incident Commander and S-211 Portable Pumps and Water Use. Opening new taskbooks for crewmembers to work on throughout the season is an essential training and developmental tool for our firefighters. All crewmembers on San Juan IHC have FFT1 (Firefighter Type 1), ICT5 (Incident



Commander Type 5) and FALB (Faller B) taskbooks initiated if they don't already have them.

In addition to NWCG courses, we also spent time training with our Low Angle Rescue equipment. This gear is a mechanical advantage system that enables us to transport medical patients up or down a slope using ropes, breaker bars, a stokes basket, and man power with relative ease. This spring, four individuals travelled to Fort Collins and spent three days of intensive instruction with members of other hotshot crews from around the region to learn how to correctly set-up and operate this specialty equipment. These four individuals then returned to the crew and shared their knowledge about this equipment and we performed several low angle rescue scenarios throughout the season, including a scenario on the Sand Gulch fire.



In addition to classroom learning and practice scenarios, the fire season provided the crew with ample training opportunities to put their classroom training in action. As a result, several people were able to finish open taskbooks. Four members of the overhead, Keith Bedonie, Scott McCreary, Nate Christiansen and Jacob Birdsell finished taskbooks. Keith and Jacob finished their FIRB (Firing Boss) taskbooks, Scott finished his CRWB (Crew Boss) taskbook, and Nate acquired his FALC (Faller C) certification early in the year. In addition to Keith, Scott, and Nate, several crewmembers finished taskbooks of their own. In all, two FFT1s (Firefighter Type 1), four ICT5s (Incident Commander Type 5), one FALB (Faller B), 2 FALCs (Faller C), and one FALA (Faller A) were signed off.



## *Safety*

Safety is a central focus to all activities undertaken by San Juan IHC. Countless hours throughout the season are spent discussing safety topics, ranging from daily briefings to AARs (After Action Reviews) to RMAs (Risk Management Assessments). Discussing and understanding the hazards we confront on a daily basis helps us keep situational awareness high so all individuals on the crew can be as safe as possible. The crew had an overall successful year in regard to keeping everyone healthy. The crew managed to ward off any kind of camp crud that usually plagues a crew, with only a few people coming down with stomach bugs that led to one person missing an entire 14 day assignment. A mere five CA-1s were filed for injuries. Three CA-1s were filed for injuries occurring on the fireline (one wrist injury and two eye injuries), with the two eye injuries leading to one missed shift of work a piece. The remaining two CA-1s (one back injury and one knee injury) occurred on the fireline, but were a result of aggravation of earlier or chronic injuries.



Participating in a learning culture about safety is important to San Juan IHC as well. We consistently review Lessons Learned cases and 24/72 hour reports about past accidents so we can learn from other people's experiences as well as build mental slides in our minds of situations to watch out for. Also, when close calls occur during a work shift within the crew they are often either immediately addressed with an on the spot AAR or it is discussed at the end of shift with the entire crew. Discussing close calls within the crew is not a way to point fingers, but instead is viewed as a learning opportunity to dissect what happened and recognize ways we can prevent future close calls from occurring.





## *Fuels and Project Work*

Fuels and project work filled the small amount of down time we had between fires this year. 18 days in all were spent working on various fuels reduction projects. The majority of those days, 14 to be exact, were spent on the Animas City Mountain project, a high profile WUI (Wildland Urban Interface) fuels reduction project that drew many hotshot crews' services. This project consisted of cutting small Ponderosa Pine, Juniper, and Oak Brush around mature Ponderosa Pine trees to restore the stand to a more open, natural and, thus, fire growth resistant canopy along the east and west trails of Animas City Mountain. Thankfully, this project was completed after two years of cutting by San Juan IHC and other IHC crews in August 2011.

The remaining four days of project work were spent helping the San Juan National Forest Columbine District prep burn units and thinning fuels around the East Animas bunkhouse as well as a short lived project near Worland, Wyoming that entailed thinning lodge pole pine unit.



## *New Developments*

This year, in an effort to contribute to more sustainable practices in the fire world and lessen operating costs, San Juan IHC begin using rechargeable lithium ion battery clam shells for our Bendix King handheld radios. These lithium ion batteries replaced the AA battery operated clam shells that are typically used with these radios. Because a hotshot crew typically operates for between 150-175 days in a season, most of which are spent either on fire assignments or project



work, this equates to a lot of handheld radio use which of course leads to massive AA battery use and disposal. For example, this season we had 103 operational days in which we would have used our handheld radios (fire assignments and project work combined). We typically run ten radios within the crew and each radio takes nine AA batteries. For simplicity's sake, we'll say that each of those radios require that the batteries be changed every day. This would mean by the end of the season we would have used 9,270 AA batteries.

Number of radios	Number of AA batteries needed per radio	Number of operational shifts	Total number of AA batteries used
10	9	103	9,270

But, by utilizing the rechargeable lithium ion batteries we nearly eliminated the need to use AA batteries. The only time AA batteries were used was when the crew was away from their vehicle for an extended amount of time (such as being spiked out) and the charge of the batteries ran out. However, the charge of batteries would typically last around five days if the radio was being heavily used. For light users, the charge of the batteries would last for weeks, so even when crew was away from the vehicles for an extended amount of time there was rarely a need to revert to AA battery use.

Initial Rechargeable Lithium Ion Battery Costs		AA Battery Costs at \$4.99/24 battery pack (per 2011 GSA Catalog)
Rechargeable Lithium Ion Batteries	\$1,895.55	$\$4.99/24 \text{ batteries} =$ approximately $\$.21$ per battery $\$.21 \times 9,270 =$ <b>\$1,946.70</b>
Solar Panel Installation	\$814.16	
Battery Chargers	\$801.00	
<b>Total</b>	<b>\$3,510.71</b>	

According to this break down our first year using the rechargeable lithium ion batteries didn't yield us any cost savings, as the start-up costs didn't outweigh the AA battery use costs ( $\$1,946.70 - \$3,510.71 = -\$1,564.01$ ). However, when we look on to upcoming seasons we will soon see the cost savings build up. For each additional year we use the rechargeable batteries in place of AA batteries we will accrue \$1,946.70 in savings or more depending on the number of operational days worked. Dollar signs aside, the environmental benefits of not filling our land fills with toxic battery waste, which takes around 100 years to decompose, are incalculable.