

Saving Nutty Putty Cave

Jon Jasper

Summary

In the spring of 2006, Nutty Putty, Blowhole, Rabbit Trap, and Silly Putty Caves were gated under a Management Agreement between the Timpanogos Grotto and the Utah State Institutional Trust Lands Administration (SITLA). Ironically, these caves were gated to ensure their long-term access. Safety concerns have been exponentially growing. With the most recent chain of rescues, SITLA began considering serious alternatives, including a permanent closure of the caves.

As an alternative, a lease agreement was pursued led by BYU's Recreation Department; however, it was permanently dropped when the four drownings in BYU's closest cave, Gollums Cave, made national news. The Timpanogos Grotto didn't have the million-dollar liability insurance policy required to pursue a lease agreement; however, after showing continuous concern, SITLA presented the option of a Management Agreement where the Timpanogos Grotto could voluntarily manage the cave for the state under mutually agreed guidelines. Thus, Timpanogos Grotto gated and is now managing SITLA's caves.

Now that the caves are gated and being managed by Timpanogos Grotto, the "real" test begins. Will the caves' management be accepted? Can the caves truly be saved? Many cavers believe "saving Nutty Putty Cave" is an impossible task. This concept is ultimately being put to the test through the installation of a cave gate and the implementation of a permitting system. The new access requirements are slowly being accepted and most of the safety and conservation problems have been eliminated.

Problems begin

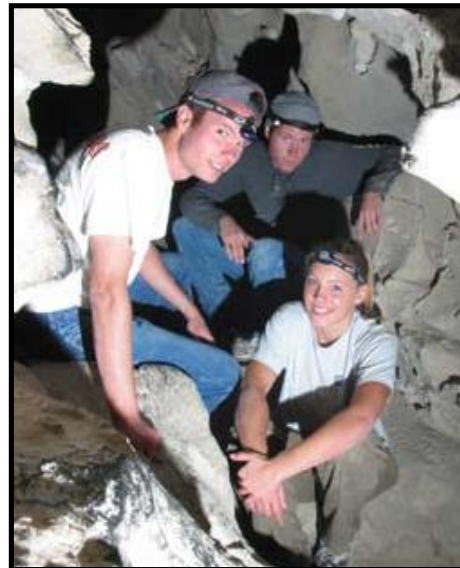
Nutty Putty Cave was first entered on April 19, 1961 after a rancher told Utah caving pioneer, Dale Green, about a blowing hole on the top of the hill. The cave was a simple dig involving minimal moving of rocks to gain access.

Several months later, Dale Green took a BYU professor to the cave. The professor started

leading his own trips to the cave, and it quickly gained popularity for its proximity to Provo and its sporty labyrinth of small crawls and climbs.

The cave continued to grow in popularity. In the mid-1990s, the first rescue occurred in the cave. This rescue involved a young scout who crawled into an extremely tight passage and then lured his bigger friend to follow. The passage, now referred to as "the scout trap," involves several body-tight bends to reach. After the turns, the passage plunges into a funneling hole where the scout was trapped for 12 hours. The last 90 degree bend made it nearly impossible to assist the scout. In the end, a caver verbally coaxed the scout out from the hole.

In 2001, the same situation occurred. One small scout leading a larger into the same "scout trap." The scouts were stuck in the cave for about four hours before an experienced caver was able to calmly coax the scout out of his trap.



Typical visitors to Nutty Putty Cave *Jon Jasper*

During this rescue, the scout leader never entered the cave. He took 12 year old scouts to the cave and let them explore the cave as he waited at the entrance. Even as a caver emerged to initiate the rescue using his cell phone and the SAR teams gathered, the scout leader never entered the cave.

Nutty Putty Cave was quickly becoming the place in Utah to learn all the wrong caving techniques. Helmets were rarely seen. The cave often carried an odor of a sweaty gym, and on the weekends, lines existed to get in and out, making a very unreasonable escape for the emergency bathroom runs. The cave's bedrock-lined tunnels were becoming polished from the high-use. The resulting slippery surfaces made the climbs, like the Big Slide, a waiting disaster.

Making an effort

Most of the grotto cavers labeled Nutty Putty Cave as "a lost cause" - a cave that they never go to again. In a resistant effort, I started to research and document the problem hoping some day to be able to apply a reasonable solution. I began a cave visitation studies and restoration efforts.

To establish the amount of visitation and identify the use groups, a cave register, constructed of four-inch ABS sealed pipe, was placed within the first room of the cave. This register recorded 1,711 visitors over 8 months or an average of 7 people/day.

This register had many difficulties. The location of the register was just inside the cave where the passages first starts opening up. Even though groups often bottle-neck here, it wasn't a good location for most folks to stop and sign a register. Due to the cave's high humidity, the paper within the register had to be changed about once a month or else it would turn into an unreadable mush.

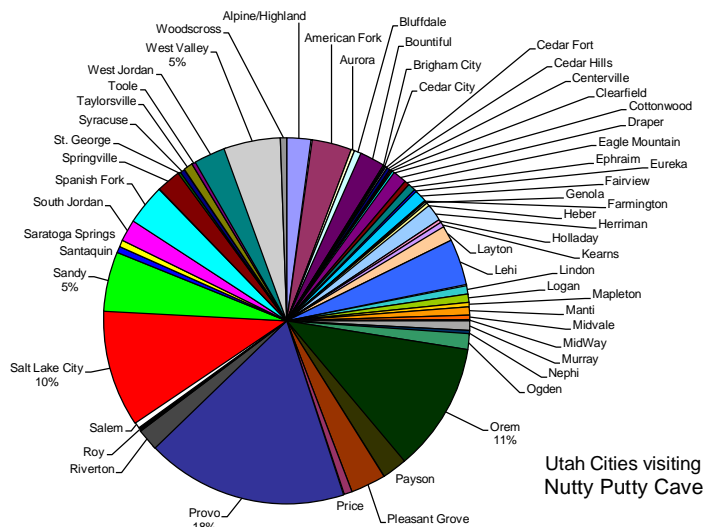
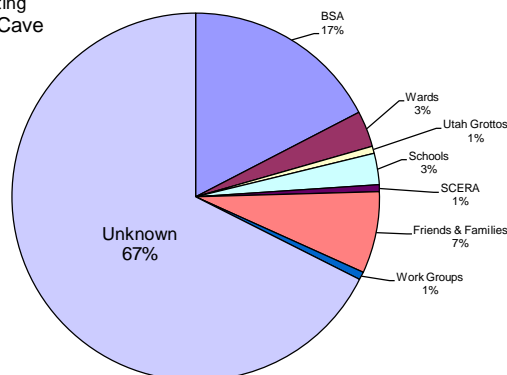
In an effort to get higher quality visitation data, light sensing dataloggers were implemented. The first attempt was placing a small HOBO light event logger into the top of the in-cave register to compare the two techniques. With the logger compartmentalized in the top of the register, a small flashing LED could be seen in total darkness. The humidity also erased any markings identifying it as a register. Within a few weeks of being placed, a "pipe-bomb" was reported. The Utah County Sheriff's office responded, prepared to destroy the threat. The response crews were called off after a call to caver Spencer Christian who explained that their bomb was actually a harmless cave register. Not getting a good seal to protect it from the high humidity, the logger failed. Other methods were implemented to col-

lect good visitation demographics and accurate visitation times.

In October 2003, a register was installed on the surface near the entrance to record visitation and to distribute educational materials (cave conservation, safety, & maps). The objective of the register was to establish group demographics (who & where) of the cave's use. The hope was that this data would be used to forge a positive solution for the future for Nutty Putty Cave by teaming together the interest groups.

Demographic data were collected from 1,251 visitors from the surface register from October 2003 to August 2004. The results show that the highest visitation group visiting Nutty Putty Cave was the Boy Scouts of America (17%). All of the Utah Grottos accounted for only 1% of the total visitation. Location demographics show that the top visiting cities are: Provo (18%), Orem (11%),

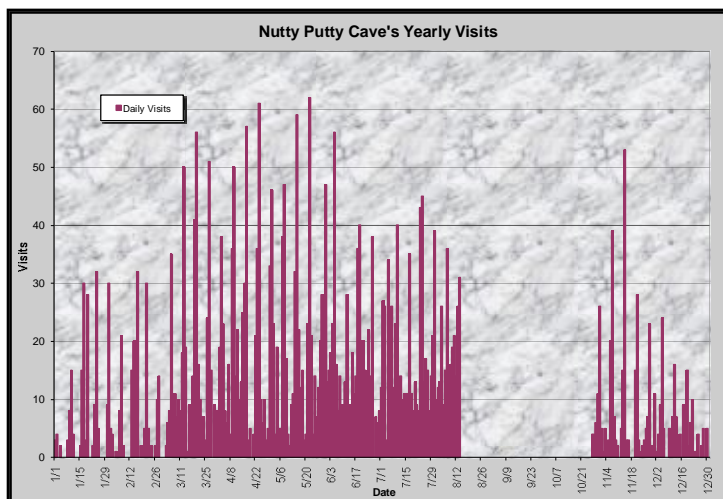
Groups visiting
Nutty Putty Cave



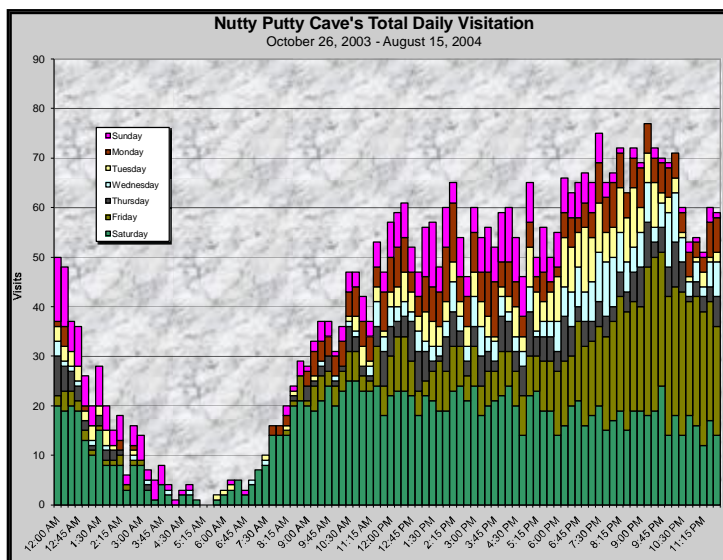
Utah Cities visiting
Nutty Putty Cave

and Salt Lake City (10%). Out-of-state visits made up 8% and out-of-country visits make up 2% of the total visitation.

Another light recording datalogger was tried. This time it was a HOBO Stowaway light intensity datalogger. The purpose of the Stowaway was to study visitation trends. It recorded the maximum light intensity passing by it every 15 minutes. The results showed that the cave is occupied 13.8% of the total time and estimates 4,909 visits/year. This result was a huge difference when compared to the cave register's estimate of 2,528 people/year.



Daily visitation from 2003 to 2004 Jon Jasper



Visitation broken out in 15 minute intervals Jon Jasper

The interesting question raised was, "What are Utahns doing visiting the cave as late as 4:00 am?" Since most of this night activity was collected in the winter, any hour may be possible for the summer!

The hope was to get visitation statistics for one full year with the Stowaway light intensity datalogger; however, after 9 months, it was stolen. The surface register received many problems due to winds blowing out pages after visitors left the top open.

As I was studying the visitation, I was also trying to keep a fixed rope in good condition on the Great Slide. Over the years, visitation has nicely worn down the bedrock into an extremely slippery polished limestone. A rope handline definitely became needed. First, I replaced existing ropes with my old ropes by simply tightening the rope around natural anchors. The unblemished rock climbing rope lasted about two months before completely fraying through the outer sheath anywhere it touched rock. I then placed a caving rope. It lasted for about four months before I discovered someone put a huge knot where the rope was slightly slapping the rock within the middle of the line. I then placed bolts to keep the rope completely off of the rock. It lasted about one year before the knots placed to grip for climbing were mostly worn through.

On one trip, I noticed problems with the rope fraying. I decided to take the rope out of the cave. Just as I was finishing derigging the rope, I heard a small group of visitors approaching. To avoid the odd questions of why I was removing the rope, I hid the rope by sitting on it as the group passed. They were instantly concerned that the rope was missing. I heard them complaining and struggling with the drop. I decided to replace the rope with a newer caving rope I happened to have in my car.

I quickly returned with the new rope and was laying it out when another group came upon me. I explained to them how I had the rope lying out to make sure it would be long enough. The rope was just lightly wrapped around and not tied to the pillar in the middle of the slide. I gave them the option of either waiting for me to finish or to continue without the use of the rope. As I came down the passage, the group was indeed using the rope. The last one to climb looked at me and asked me

“it is okay?” I could hear the group insisting for her to use the rope. I was very amazed how much the rope had become needed. I concluded if the rope was removed, probably within a day to a week, a serious accident would occur.

Introductions to State Trust Lands (SITLA)

Looking for projects for his Young Mens Group, Spencer Christian arranged a meeting with SITLA to discuss constructing an educational kiosk at the cave’s entrance. The kiosk was to have information on safe caving, cave conservation practices, and an informative map of the cave. The kiosk never came to be; however, the meeting was the start of discussions with the state about the growing safety problems.

Our SILTA representative explained that the Utah Trust Lands, where Nutty Putty Cave resides, are to be managed “in the most prudent and profitable manner possible, and not for any purpose inconsistent with the best interest of the trust beneficiaries. The beneficiaries do not include other governmental institutions or agencies, the public at large, or the general welfare of the state.” In the simplest of terms, Utah Trust Lands are managed to maximize profits for the Utah school system. They do not manage caves.

The state was willing to work with interested parties improved safety and resource protection. Under the state’s supervision, these interested parties could implement sound management practices that will promote cave safety and resource protection without cost, increased liability, or negative press for the state.

About 10 years prior, the state actually came to the Utah Grottos seeking assistance on how to manage Nutty Putty Cave. In a Utah Grottos’ meeting, the grotto representatives voted not to help. They concluded the situation was too large and complex to handle.

At this meeting, I introduced how Kyle Voyles and I predicted the fatality that recently occurred at Bloomington Cave and led into how a fatality would occur with a bad fall off of the end of the Great Slide in Nutty Putty Cave. Stories existed where a visitor had fallen off the slope and broken his leg. He was left behind as the group continued. They returned and assisted him on the way

out. On another trip, a visitor actually took the head fall that I predicted would create a fatality. He amazingly exited with some assistance from friends and was taken to the hospital where he was treated for a serious concussion. Our ideas were seeded; the wait began for another event to create the change.

Nutty Putty Cave’s safety problems were noticeably increasing, if left unchecked would result in a fatality forcing the complete closure of the cave. This conclusion became overly apparent when two full callout rescues occurred near Labor Day Weekend 2004.



Mock rescue for TV coverage Jon Jasper

The catalyst for change

Nutty Putty Cave has had only four complete callout rescues. Amazingly, two of the four occurred on back-to-back weekends. All of the rescues involved people being stuck. All had exited on their own without being strapped to a rescue litter and none needed any medical treatment. These rescues were more comical than life-threatening.

The first two rescues involved boy scouts (about 12 years of age) getting stuck in the same spot in the cave. The spot is now referred to as the “Scout Eater.” On the second rescue, the scout leader never entered the cave even as a full rescue unfolded before him. With the 90 degree bend at the Scout Eater, rescuers couldn’t help pull the scouts out. They were only able to coax the scouts out. They concluded once the scouts relaxed their tightened muscles, they were able to escape on their own. At the rescue debriefing, they discussed using drugs to facilitate the relaxed state for a quick rescue.

The other two rescues involved older college-age teens both trapped in the Maze Section. The rescuer used rock chisels to free them. The “real” hazardous situation of folks sliding off the Great Slide receiving broken bones or serious concussions never created any media coverage.

In the fall 2004, about a month after the rescues, the Utah County Sheriff’s Office contacted SITLA to look into possible actions to prevent future callouts. SITLA contacted the cave’s known user groups. Timpanogos Grotto (Jon Jasper, Spencer Christian, Brandon Kowallis, and Chuck Acklin), Boy Scouts of America (BSA), Sheriff’s Department, and local Search and Rescue (SAR) gathered to discuss the problems and the possible solutions. At this meeting the Sheriff’s office and local SAR were proposing to block off the passages where rescues could occur. Seeing that most of the passages within the cave lead to passages where visitors could get stuck, we concluded that the friendlier approach would be to gate the cave and make it an access-by-permit-only cave. The discussion quickly turned to how to make the proposal happen.

The lease option

The state’s preferred solution was to lease the land to a qualified organization. This method would allow the organization to have complete control with the ability to manage the cave as they chose. However, to be a qualified organization, a million dollar liability insurance was needed, making the Timpanogos Grotto (or the NSS) ineligible. Being the highest use group, the BSA started the pursuit of a lease but quickly declined. The Recreation Department from Brigham Young University (BYU) led by Phil Brown was next to pursue a lease requesting that the Timpanogos Grotto provide the technical expertise on how to best gate and manage the cave.

For about 8 months, BYU showed a huge commitment to getting the lease. A deadline date was created to finalize the lease and construct a gate before Memorial Day Weekend 2005. As the summer rolled in, the lease application made it to the university’s President. On August 18, 2005, three months after the deadline, the real “wow” occurred - four drownings in a nearby Provo cave.

In Gollums Cave, the nearest cave to BYU’s campus, four drownings created a national tragedy story. The cave, mostly forgotten by cavers, was slowly becoming well-known by local adventurers. Two couples entered the cave leaving the odd man out waiting. They lined the mined entrance with candles, and then swam 16 ft underwater to reach a 5-ft long room barely big enough for the four of them. Their bodies were found in line all facing out about 6 ft from the water’s exit.

The largest news frenzy in Utah Caving history resulted. The Timpanogos Grotto website hits jumped from an average of 8 hits per day to close to 200 hits/day. The word of the accident was carried nationally. Even a CNN segment was filmed on the story, but it was booted due to arrival of Hurricane Katrina. Such a story was expected to create many changes as it stressed the need to seek increased safety and training through local grottos. No newcomers were brought in to the grotto meeting; however, the BYU lease of Nutty Putty Cave was then officially dropped. The lease shortly pursued by the Recreation Department of Utah Valley State College (UVSC). The lease option was no more.

The Management Agreement

Many months passed without a word. In late November, Neil Nokkentved from the Daily Herald called for an update. I gave him the scoop on the failing leases and what I felt may be the state’s next move. The state had a strong stand on the need to change the “status quo” at Nutty Putty Cave. Because the lease had failed, I assumed the state would soon close the cave. Immediately after the interview, I called SITLA to ask if there was anything else left to pursue.

The idea of the Timpanogos Grotto managing the cave through a Management Agreement was explained to me. Under such an agreement, the Timpanogos Grotto would manage the cave; however, all regulations and actions would need prior SITLA approval.

I called back Neil to explain to him the course of action. Unable to withdraw the original article, two were published. The titles changed from “Fate of popular cave still in limbo” to “Cavers trying to keep cave open.” The state representatives weren’t amused by the new chain media

coverage. To avoid open debate from media and outspoken cavers, the progress of the future meetings was only discussed amongst cavers that were showing an invested interest.

During the next six months, Chuck Acklin and I met every other month with the SITLA representatives to work out the details of the Management Agreement. Being concerned about how the high visitation to Nutty Putty Cave may be transferred to its other caves, SITLA discussed the need to close the other nearby caves: Blowhole, Rabbit Trap, and Silly Putty. While our meetings were occurring, SITLA also looked into designs and contractors. To save access to all of these caves, they all would need to be gated and managed together.



The Indian Blanket in Blowhole Cave Jon Jasper

The original concept was to create an interest group lead by Timpanogos Grotto to manage Nutty Putty Cave. The interest group would consist of any group with an strong interest in helping manage the cave. Complying with the guidelines and requirements agreed upon with the state, each group would then manage its group's keyed access to the cave. When concerns would arise, the necessary changes would be negotiated between the Timpanogos Grotto and SITLA.

However, due to the high number of anticipated break-ins that would require lock and key changes, initially combination locks were used. A website approach was also created so that permits could be evaluated and approved in a timely manner. The hope was to quickly reestablish visitation to help advertise the successes and to protect the gate.

Gating and management begins

On April 14, 2006, the Management Agreement was signed. The gates for Silly Putty and Rabbit Trap Caves were ready and waiting. Both gates were installed on April 18, 2006. On April 25 and 26, Blowhole Cave gate was constructed. On the last day of the construction, Dale Green, Cami Pulham, and I heard the first radio announcement of the gating of Nutty Putty Cave. When I returned home, I had about a dozen messages from various media sources wishing for interviews. The craziness had begun.

The gating of Nutty Putty Cave was originally planned for the week after the installation of the Blowhole Cave gate. However, I decided to let the news sink in, give a chance to gather permits for access, and a bit of badly needed organizing and prefabricating.

The gate construction occurred in the beginning of the week just before Memorial Day Weekend. With a crowd of about a dozen helpers and 20 hours of work, on the early morning of May 24, 2006, Nutty Putty Cave was gated. That afternoon, I issued the first permit from my front door to some folks we denied access during the construction of the gate.

The Nutty Putty Cave gate survived the first weekend despite many threats. However, in the first weeks visitors didn't hesitate to take advantage of the gate's flaws. They were able to break in with ease, however with no harm to the gate. We made a couple of additional short trips for necessary modifications to strengthen the security and to paint the gates.

The gate was designed to allow break-ins to occur without costly damage to the cave. The main idea was to replace locks to minimize gate repairs. Amazingly, the first lock replacement at Nutty Putty Cave wasn't until September 23. This replacement was after two lock replacements at the 60 ft-long Silly Putty Cave.

In the past, with the high use, trash removal seemed to be a losing battle. Each weekend new accumulations of beer cans, sweat shirts, and misplaced bodily fluids would appear. With the permit system, keeping the cave free of trash was a more reasonable goal. Trips were immediately planned to remove trash around on the surface

and throughout the entire cave. Trash pick-up sticks were used to remove the trash previous visitors tried to hide within the cave's cracks. The cave's notorious odors of sweat, rotting garbage, and bodily waste were eliminated.

The permit process forced visitors take more time in preparing their trips into the cave and identified the necessary preparations and possible risks. In addition, to increase safety down the Great Slide, a stainless-steel cable ladder replaced the long-standing rope handline.

Paying it back

After the gates were completed, the time came to collect the funds that were pledged. Timpanogos Cave National Monument supplied the equipment (welder/generator, cutting torch, chopsaw, etc) and expertise (Cami Pulham's and my time). The entire amount of the profits from the 2005 Utah Valley Rocky Mountain Regional, about \$400, were devoted and another \$600 was donated directly from the Rocky Mountain Region's fund - an interesting consequence of blindly electing three Timpanogos Grotto members to serve as Chair, Vice-Chair, and Treasurer of the Region. The Timpanogos Grotto donated \$600 from its general funds (of which \$100 was from a NSS Cave Conservation Award). The last donor was from the newly formed Western Cave Conservancy. They offered to match up to \$5,000, however being the last hit up, just paid the remaining cost of \$700. So in the end, \$2,300 covered the entire costs of the four cave gates, a stainless-steel cable ladder, locks, and a light intensity datalogger.

Saving Nutty Putty

When I first started visiting Nutty Putty Cave, helmets and good sense seemed to be extremely rare. Boy Scouts and college kids visited the cave with little or no preparation or leadership. This project was a collaborative best attempt at saving Nutty Putty Cave from its total closure.

This project has been four year journey involving many interested people from many different organizations. Even though the uphill battle to bring Nutty Putty Cave under management has been won, the "real" battle of "saving the cave" is just beginning. Many of the past visitors will

not accept such a dramatic change. Many cavers don't understand the full issues at stake or the burden the caves' manager voluntarily takes on. Must we wait until a life is taken before showing concern? Must we wait until the cave is permanently closed until to help save it?

You too can still make a difference. There are many ways you can support our efforts. For some, the easiest way is to volunteer your time and expertise; for others, it maybe through financial donations. Many volunteer projects exist picking up trash in or around the cave, helping with education on safe, low impact caving, or simply helping with checking and replacing locks. Donations, to pay for locks, to provide for gas for repair visits, and to create educational outreach and training opportunities, can be accepted. Please send checks by making checks out to the Nutty Putty Cave Fund; Timpanogos Grotto; c/o Richard Downey; 380N 600E; Orem, UT 84097-4843.



Nutty Putty cave gate Jon Jasper

Getting Permits for Access

If you are wishing for access to Nutty Putty Cave or Blowhole Cave, first visit the most up-to-date access requirements at <http://www.caves.org/grotto/timgrotto/NuttyPuttyAccess.html>. All requirements must be fully understood and followed by all of the trip participants prior to the trip. Then follow the links to download and submit a request for a permit to the present manager, Justin Epps. These permits must be signed by all participants, showing they all read, understand, and are willing to follow all of the cave access requirements. When completed, the permit can be faxed to: (435) 654-3989 or mailed to: Justin Epps; PO Box 817; Heber City, UT 84032 within a reasonable amount of time (5 to 7 days) for Justin to respond before your planned trip.