Lane County Sheriff’s Search and Rescue Annual Report: 2016

Search and Rescue - Overview

In Lane County, “There is abundant wildlife and various water-recreation opportunities including snow in the winter, beaches in the summer, remote peaks to climb and the availability of forest products to harvest. Lane County provides all the ingredients for a multitude of search and rescue activities.” - 2016 SAR Pre-Plan

In 2016, Lane County Sheriff’s Office Search and Rescue (SAR) participated in 172 missions and assisted 231 citizens.

Missions took place on both land and in water, covering everything from rescues and searches for missing people to major medical calls and evidence searches. SAR is staffed by two full-time employees and one part-time assistant.

In 2016, 218 search and rescue volunteers participated 27,130 hours. After extensive training, 22 volunteers graduated from our SAR 101 class and became certified by the Oregon State Sheriff’s Association (OSSA) in Search and Rescue.

The SAR staff depends on the tireless efforts of volunteers in eight specialized search and rescue teams:
- Eugene Mountain Rescue
- Explorer Post #178
- Ground Search & Rescue
- Lane County Sheriff’s Amateur Radio Operators
- Lane County Sheriff’s Mounted Posse
- Pacific Northwest Search Dogs
- Special Vehicles Group
- Water Search & Recovery Team

Jason Bowman, New Assistant SAR Coordinator

In 2016, we brought on an Assistant SAR Coordinator, Special Deputy Jason Bowman. Jason comes to us from Arizona where he was a long-time volunteer with the Mountain Rescue Association accredited Southern Arizona Rescue Association. Jason is an EMT, a Rope Rescue Instructor, Swiftwater Rescue Technician, and has significant experience in Search Management, Helicopter Rescue, and Cave Rescue, as well as teaching numerous SAR disciplines. Jason is very excited to bring his skills and experience and apply them in his new environment, while continuing to learn from and work closely with all the volunteers in our program.
Our Search & Rescue Volunteers

In 2016, 218 Search and Rescue volunteers participated in a total of 27,130 hours.

Of these hours, 6,893 were mission hours, with meetings, public education and public events, equipment maintenance, and monthly trainings on search and rescue techniques and skills making up the other 20,237 hours. That averages out to be 124 hours per SAR volunteer!

To maintain an active status, and the Oregon State Sheriff’s Association Search and Rescue certification for ground searchers, members must volunteer at least 30 hours per SAR year (LCSARO members need 15 hours). Many volunteers exceed this and several belong to multiple teams, requiring them to meet additional requisites.

In addition to the eight specialized teams, some volunteers also take the lead as team medics, with Project Lifesaver (see page 10), and by maintaining SAR vehicles and equipment.

Table 1: Total Volunteer Hours by SAR Activity

<table>
<thead>
<tr>
<th>SAR Activity</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAR Trainings</td>
<td>12,521</td>
</tr>
<tr>
<td>SAR Missions</td>
<td>6,893</td>
</tr>
<tr>
<td>SAR Public Events &amp; Education</td>
<td>3,944.25</td>
</tr>
<tr>
<td>SAR Meetings</td>
<td>3,045.25</td>
</tr>
<tr>
<td>Maintenance</td>
<td>726.5</td>
</tr>
<tr>
<td>Total Hours</td>
<td>27,130</td>
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</table>

Figure 1: Total Volunteer Hours by SAR Activity
Newly OSSA Certified Volunteers

Each year, aspiring SAR recruits embark on a training we call “SAR 101,” which is the official way to become certified to the Oregon State Sheriff’s Association’s (OSSA) Search and Rescue standards. This extensive training lasts February through mid-April and volunteers rack up over 100 hours. Trainings include Survival Skills, Land Navigation, Search Techniques and Strategies, First Aid, Radio Communications, Search Management, Incident Command Systems, and a final overnight mock search. In 2016, 22 volunteers graduated from our SAR 101 class and became mission ready!
Trainings

As shown on page 2, almost half of the SAR volunteer hours can be attributed to trainings. Trainings help keep volunteers up on their skill sets and encourage team building, which is vital when on a SAR mission. Many of our teams coordinate their own trainings, whether it be the Dive team completing monthly trainings at the local pool or in rivers, or our Special Vehicles Group (pictured), that does quarterly trainings in various terrain, including in the snow and on the sand dunes of the coast.

EMR Recertification

The Mountain Rescue Association (MRA) certifies mountain rescue teams in three disciplines: technical rock rescue, snow and ice rescue, and search techniques. Certification with the MRA is prestigious, with 169 MRA-accredited teams throughout the United States and Canada. Our team, Eugene Mountain Rescue, is one of them!

Member teams must recertify in all three disciplines every five years. Reaccreditations offer MRA teams an opportunity to test their skills in a contrived rescue scenario while evaluators observe, assess, and offer feedback.

On June 4, 2016, EMR recertified with the MRA in both search technique and technical rock rescue. The team was presented with a search scenario involving an overdue mushroom hunter in the woods near Mary’s Peak in the Oregon Coast Range. EMR members demonstrated organizational knowledge of search technique and standards by coordinating and affecting a detailed search of the area, tracking a series of clues that led to the missing individual.

The technical rock scenario involved two mock subjects, one of whom was supposedly injured in a fall and the other of whom became stuck while sport climbing, also near Mary’s Peak. EMR members gained access to the site and a rescuer rappelled to the trapped patient, picking him off the cliff and lowering him safely to the ground. The fallen patient had to be treated for injuries and evacuated by raising a stokes litter up the cliff via a roped haul system (pictured).
Preventing Missions: Public Education & Events

Quality outdoor education is one of the goals of Lane County SAR. In 2016, volunteers delivered outdoor safety presentations to schools and retirement communities. Eugene Mountain Rescue members assisted with Basic Mountaineering classes held for the community.

Search and Rescue also helps the community through public events. The PFD Exchange is always one of the most successful events. Various SAR groups provided First Aid at the Lane County Fair, and assistance and radio support at several races throughout the county. SAR volunteers also supported the Oregon Physical Abilities Test and Equine Symposium Day, as well as safety fairs at Home Depot, the Oakridge Fire Station, and Jerry’s Home Improvement.

PFD Lifejacket Exchange

The PFD Exchange is always our most successful event, in which citizens can bring in old lifejackets their children have outgrown and trade them for proper-fitting ones. Each year, this event is held in Cottage Grove and at the Cabela’s in Springfield. Hundreds of families are served and kept safe for the summer. Never forget that a well fitting lifejacket could save your life!

Climb School

Eugene Mountain Rescue (EMR) promotes outdoor education and safer outdoor recreation to the community through its annual basic mountaineering class. Climb School, a joint venture with the outdoor club The Obsidians, is a longstanding tradition and is how many EMR volunteers get their start.

Climb School students learn the important basics of safe climbing in a range of high-angle mountain environments including rock, glaciers, and steep snow where ropes, ice axes, or other specialized climbing equipment is required. Students acquire a variety of crucial skills such as working together as a team, climbing knots, self-rescue, and the proper use of equipment. They also review the different types of climbing, mountain hazards, fitness, nutrition, and how to choose the proper gear and clothing. Students leave the course with the skills necessary to participate as part of a climbing team with an experienced leader on many of our local Oregon peaks.

Usually held in April, Climb School consists of three classroom sessions and two field days with plenty of hands on training and skills drills. This popular course is open to the public.
Missions

For SAR, a mission is any response to a request for assistance per Oregon Revised Statute 404. Search and rescue responds to missing people, overdue subjects, deceased subjects, water rescues, evidence searches, stranded and overdue motorists, and endangered subjects.

These missions occur year-round, with water missions showing a sharp increase in the summer months as the amount of water recreation increases. Land missions usually occur year-round.

During the 2016 calendar year, SAR responded to 172 missions, including assists to other agencies. Some of these missions spanned multiple months and are only represented in this data in the month they began.

Personnel participating in missions include LCSO deputies, SAR Volunteers, and in some water missions, Fire personnel.

Table 2 shows the number of missions by month. Two missions were both land and water missions.

Collaborating agencies included: Benton County, Cottage Grove Police, Curry County, Deschutes County, Dexter Fire, Douglas County, Eugene Police, Eugene/Springfield Fire, Lane Fire Authority, Linn County, Lowell Fire, Marion County, McKenzie Fire and Rescue, Mohawk Valley Fire, Multnomah County, Oakridge Fire, Oakridge Police, Oregon National Guard, Oregon State Police, Pleasant Hill Fire, Reedsport Fire, Siuslaw Valley Fire and Rescue, South Lane Fire, Springfield Police, Upper McKenzie Fire and Rescue, US Coast Guard, and Willamette Backcountry Ski Patrol.

<table>
<thead>
<tr>
<th>Month</th>
<th>Missions</th>
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<tbody>
<tr>
<td>January</td>
<td>5</td>
</tr>
<tr>
<td>February</td>
<td>10</td>
</tr>
<tr>
<td>March</td>
<td>6</td>
</tr>
<tr>
<td>April</td>
<td>14</td>
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<tr>
<td>May</td>
<td>20</td>
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<tr>
<td>June</td>
<td>17</td>
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<tr>
<td>July</td>
<td>23</td>
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<tr>
<td>August</td>
<td>25</td>
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<tr>
<td>September</td>
<td>15</td>
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<tr>
<td>October</td>
<td>15</td>
</tr>
<tr>
<td>November</td>
<td>12</td>
</tr>
<tr>
<td>December</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total Missions</strong></td>
<td><strong>172</strong></td>
</tr>
</tbody>
</table>

**Figure 3: Land & Water Missions by Month**
Figures 4 & 5: Missions by Type for Land and Water

Land Missions

- Missing person: 66%
- Rescue: 17%
- Body Recovery: 6%
- Welfare Check: 2%
- Beacon Searches: 1%
- Disaster Response: 2%
- Evidence Search: 6%

Water Missions

- Rescue: 79%
- Body Recovery: 9%
- Evidence Search: 2%
- Missing person: 10%
The citizens involved in SAR missions come from every walk of life. In 2016, 231 people were assisted by Lane County SAR and the Sheriff’s Marine Patrol, including 146 males (63%), 82 females (36%), and 3 subjects of unknown sex (1%). Ages ranged from 2 to 85 years old.

The group most involved in SAR missions were males ages 21-30, followed by females of the same age.

Lane County Search and Rescue not only assists those that become lost or injured, but also locates the deceased. This helps families by bringing loved ones home and providing closure. In 2016, of the 231 subjects involved in SAR missions, 201 were found alive and reunited with their families and friends, 18 subjects were located deceased, and 12 subjects’ statuses are unknown (they are either still missing, or we were assisting another County and did not receive resolution on that mission.)
SAR Subject Activity

With such a diverse wilderness in Lane County, SAR responds to a variety of outdoor activities. In 2016, SAR responded to 119 land missions, taking place in both the wilderness and residential areas from the coast to the Cascades. The top land activity which resulted in SAR call-outs were subjects lost hiking or camping, followed by subjects that were lost or stuck in their vehicles.

In 2016, SAR and the LCSO Marine Patrol responded to 55 missions involving Lane County’s lakes and rivers. Most of these missions involved citizens recreating in non-powered watercraft, which includes inflatable rafts, canoes, kayaks, and inner-tubes. Two missions were both land and water missions.
Subject Residence

The Search and Rescue subject base was comprised of subjects who reside within, as well as outside of, Lane County: 44% were residents from the cities Eugene or Springfield, 7% from other incorporated cities in Lane County (including Cottage Grove and Oakridge), 19% from unincorporated parts of the county, 22% from other parts of Oregon, 7% from states other than Oregon, and 1% from outside the United States. This graph is based on information collected when it was possible to do so.

![Figure 11: Area of Subject Residence](image)

Project Lifesaver

Lane County Search and Rescue is an active participant in the Project Lifesaver program developed by Project Lifesaver International in Chesapeake, Virginia. The program is designed to help locate individuals who have a cognitive disorder resulting in a tendency to wander and who would be unable to get themselves home. Individuals who have a diagnosis of Alzheimer’s disease or Autism are among the common subscribers to the program. This wandering behavior is life threatening and the Project Lifesaver program is intended to utilize technology to quickly and efficiently bring help to this at risk population. Without this program these searches would have required significantly more manpower and have the potential to have lasted considerably longer.

The Project Lifesaver program works by placing a small radio transmitter on the individual who may wander. The transmitter is typically worn like a watch and is about the same size. Special radio receivers can then be used to track the transmitter when the individual’s caretaker reports them as missing to the Lane County Sheriff’s Office.

2016 was a particularly busy year for the Project Lifesaver program in Lane County. Lane County Search and Rescue worked with approximately a dozen subscribers and their caretakers, and deployed on at least 21 missions to find those who had gone missing. On each of these occasions, the missing person was found safely. In addition to performing searches using the special radio receivers, trained volunteers visit with each subscriber and their caretaker monthly to ensure the transmitter is working properly and to insert a fresh battery.
SAR Mission Land Use

Every year, Lane County Search and Rescue keeps track of the type of land that missions occur on. Because Lane County Search and Rescue is funded by General Fund and Federal dollars, we are required to report the amount of time we spend responding to missions on federal property. The hours in Table 3 include both paid employees and volunteer time.

Federal property is defined as land belonging to the United States Forest Service (USFS), the Bureau of Land Management (BLM), and the Department of the Interior. In 2016, 50% of our land missions took place on USFS property for a total of 57% of land missions on some type of federal property. As Table 3 demonstrates, the number of hours spent on missions on federal land is quite higher throughout the year.

![Figure 12: Land Use for Land Missions](image)

Table 3: Quarterly Land Use

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Federal Hours</th>
<th>Other Hours</th>
<th>Total</th>
</tr>
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<tbody>
<tr>
<td>January - March</td>
<td>1,291.25</td>
<td>589.26</td>
<td>1,880.5</td>
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<tr>
<td>April - June</td>
<td>1,112.25</td>
<td>481.5</td>
<td>1,593.75</td>
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<tr>
<td>July - September</td>
<td>2,078.75</td>
<td>483</td>
<td>2,561.75</td>
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<tr>
<td>October - December</td>
<td>1,879.5</td>
<td>274</td>
<td>2,153.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6,361.75</strong></td>
<td><strong>1,827.76</strong></td>
<td><strong>8,189.5</strong></td>
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The numbers at a glance...

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2016</th>
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<tbody>
<tr>
<td># of Missions</td>
<td>80</td>
<td>172</td>
</tr>
<tr>
<td>Total Volunteer Hours</td>
<td>21,405</td>
<td>27,130</td>
</tr>
<tr>
<td>Total Volunteer Mission Hours</td>
<td>2,405</td>
<td>6,893</td>
</tr>
</tbody>
</table>
Medical Director and Medical Team
In 2016, we expanded the medical side of Search and Rescue. A medical team was created, composed of volunteers with advanced medical experience, including talented doctors, nurses, Emergency Medical Technicians, Outdoor Emergency Care Technicians, and Wilderness First Responders. With the help of our new Medical Advisor, Dr. Mark Brauner, they created our SAR Medical Protocols, which include standards of care for all levels of our CPR/First Aid trained volunteers.

The POSSE Celebrated 75 Years!
The Lane County Sheriff’s Mounted Posse celebrated their 75th anniversary of providing volunteer services to the Sheriff’s Office and the citizens of Lane County. Part of the celebration included an appreciation breakfast for their 19 Life Members. The Posse formed back in 1941, and although membership has changed over the years, their purpose remains the same: To serve the Sheriff and the citizens of Lane County through search and rescue, community service, income projects to support their efforts, and ceremonial appearances such as mounted drill performances and parades.