

Northwest Woodlands

A Publication of the Oregon Small Woodlands, Washington Farm Forestry, Idaho Forest Owners & Montana Forest Owners Associations

FORESTLAND SECURITY

**Liability and
Responsibility**

**Working with
Law Enforcement**

**Many Uses of
Trail Cameras**

**Security on
Forest Operations**

**Ideas for
Protecting Your
Forest**



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Interpretation &
Application of Science**

This magazine is a benefit of membership in your family forestry association. Contact the officers listed on page 5 for membership details.

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Issues like trespass and illegal marijuana plantations are uncommon in the clean forests of the Nordic countries. The concepts of "leave no trace" and "pack it out" are cultural norms. Photos courtesy of: Joe Goldsby (Cable Crossing Fire), Deputy Leslie (marijuana load) and Neil Schroeder (forest).

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FEATURES

LIABILITY AND RESPONSIBILITY

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NEW THIS ISSUE... A warm welcome goes out to President Mike Christianson, who is heading up Montana Forest Owner's Association. You'll find his first President's message on page 6.

PRESIDENT'S MESSAGE

 *Washington*

PATTI PLAYFAIR



Using the Whole Toolbox to Build Security

Family forestland owners are “doers.” We like to go out and do activities in our forests. We thin for forest vigor, maintain roads to prevent erosion and create wildlife habitat just to watch the critters. We are practical folks who enjoy using our favorite tools and building things. This tendency to spend most of our leisure time out in our forests is certainly good for us and our forests, but the result could be degraded forestland security. This might sound counter-intuitive, but just stay with me.

Security methods to protect forests can entail many things: physical elements (such as gates), no trespassing signs and, in one instance I know of, a moat. Good insurance policies help protect against liability claims. Robust succession plans help pass the land to the next generation, intact and in the family. These are all good things that help protect your forestland, but our tendency to go to the woods without paying much attention to the outside world may work against our security goals.

Many external factors can impact the private ownership of forestlands. Laws, regulations, taxes and even society can exert outside pressure on us, and therefore our forests—sometimes without our notice.

For example, the state Supreme Court recently ruled on a lawsuit from Whatcom County, which essentially eliminates the exempt status of domestic wells (*Hirst v. Whatcom*). This decision has rippled across the

state, impacting the rural residents in every county. Unfortunately, the results have been chaotic and alarming.

These actions by the Supreme Court, among other changes in Washington, have focused WFFA's attention even more acutely toward protecting the vital interests of rural landowners. We are using all our tools to build support for families and their prized forests. Working with legislators, laws are being developed to protect the considerable investments, both monetary and emotional, that families have made in their land.

Another significant change that can impact family forests is a new

Commissioner of Public Lands Hilary Franz who leads the Department of Natural Resources (DNR). The DNR's functions are vast, but include enforcement of forest practices rules on timber harvests, as well as wildland firefighting response. Because the commissioner sets the direction and priorities of DNR, there is always uncertainty when leadership changes. It was encouraging to WFFA when the new commissioner invited us to meet with her. We shared our concerns and interests and, more importantly, heard her priorities. We appreciate the opportunity to offer solutions to the commissioner to ensure DNR's future success.

However, efforts by your forest owner associations are not enough. The same way you work in your forest, please become a doer in the outside world. Meet your legislators to share what matters to you. Watch for changes in the state agencies, especially those that have regulatory functions. Visit with your county commissioners to hear about issues under their consideration. In other words, by using the whole toolbox you can build better security for your forestland. ■



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PRESIDENT'S MESSAGE



SANDRA MURDOCK



Keeping an Eye on Uninvited Visitors

This may seem like a lot to some of you, but after years of dealing with suspicious visitors we needed to improve security. First, we put logs or gates across all roads into our property. We now have a closed, unlocked gate at the front of the property, with Idaho Forest Owners Association, Tree Farm and Forest Stewardship signs on it. Also, we live below state land, so people used to ride quads down into our property that way. We put up a gate there too with a private property sign on it. Not

everyone respects property signs—gates were needed. Second, we use game cameras where all the trails and roads enter our property. I like the ones that have no flash—they use invisible infrared illumination. This helps keep them from getting stolen. With no flash, even at night they don't give their location away. I put them up too high for someone to reach without a ladder. I have two sets of memory cards and I go out every few weeks and swap out the cards on every camera. This saves a lot of effort. Memory cards are inexpensive and I don't want to go all the way back to the house, view the card, and then turn around and bring the cards back to the trees. Third, we have a video security system that views all the buildings and the main driveway

in from the county road. Fourth, we have motion lights in front of all the building doors. And lastly, and the best security device on the property, we have a sensor at the front gate. If the gate gets opened or if a vehicle, even a bicycle, drives in, we get a doorbell alarm inside the house and a message on our smartphones. We can then stop what we are doing and go see who is coming down the driveway. We cannot see our gate from the house or the barn, so this has improved things greatly. We at least know when someone is coming—it is great for UPS deliveries! We had too many people drive right down into our property and then, when questioned, had some suspicious excuse for being there. One guy drove in, pulled off onto a side road and then acted as if he could park and sleep. The gate sensor told me someone drove in. When I road my bicycle out to see what he was doing, he was rude to me and sped off. So, we added security. But if you can't afford the time or the money for any of what I describe, the simplest way to keep unwanted people from driving into your property is to buy and put up a sign at your gate that says something like, "Warning: Property Protected by Video Surveillance." That sign alone might keep dishonest visitors out. ■

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PRESIDENT'S MESSAGE



RICK BARNES



Security on Your Logging Operation

As I thought about forestland security, the theme of this publication, I had flashbacks to an incident in the past. I can vividly remember the sick feelings in my stomach when I received a phone call from a peer in the industry informing me he thought some of my logs were being stolen. I asked for details and he provided me with what he knew. That evening, my wife and I took my spotting scope and went on a surveillance mission. After a night of undercover work we concluded that logs were indeed being stolen. The good news for us was the logs were not ours. Ironically, the stolen logs were actually owned by the person who reported the theft to me in the first place. We discovered that a log truck driver, who lived near the road leading to our property, was the instigator. On the way from the woods to the mill he would stop in at his house, kick off a few logs and then proceed to the mill. He figured no one would ever notice a few missing logs.

Following are a few steps we take for log security:

1. Use ticket books with consecutively numbered tickets so each load has a ticket with a unique number on it. The ticket should show the date, time, timber owner, logger, brand, trucker, truck identifier, destination and product.

2. The logger fills out a loadout sheet that summarizes the loads for the day with the above pertinent information.

3. When visiting the logging site, check to make sure all the above information is being filled out at the

time the truck leaves the landing. This is critical from a security standpoint.

4. Follow up with periodic inspections of trucks that have left the landing.

5. Monitor times from the ticket book and the mill receipt to make sure they make sense. Work to explain anything that looks out of order. For example, there may be a delay due to a breakdown, a holdup getting dumped or other legitimate reason.

6. When verifying payments, make sure all loads have been accounted for and the appropriate payments have been made. It is not uncommon for us to find errors made in this process. They are human errors and quickly corrected by working with the professional log accounting administrative staff.

I am pleased to say that, to my knowledge, in my 38-year career, there have never been logs of mine or our clients stolen. That does not mean we can take security for granted. It is critical we are always paying attention and doing our due diligence. ■

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PRESIDENT'S MESSAGE

Montana

MIKE CHRISTIANSON



Montana's Infrastructure Woes

Today, the most talked-about security risk to Montana's private forests is the diminishing infrastructure for managing forests and the sale of forest products. Mills have closed or consolidated at an alarming rate. Montana has only eight primary mills today, down from 38 in 1990. The remaining mills are under stress due to lack of product with which to profitably operate. Forest owners depend upon readily available foresters, loggers, truckers and mills to

manage their forests. Each mill closure not only results in immediate loss of a sales point—it also results in fewer forest professionals who had supported the mill that closed. This diminishing infrastructure erodes the security of forest owners.

Since more and more foresters, loggers and other infrastructure are no longer near private forests, many private landowners do not realize enough financial return from the sale of timber to help finance fuels reduc-

tion or manage their forests. Instead, their forests become particularly susceptible to the threat of pests. The mountain pine beetle has run its course and killed 50-90 percent of mature lodgepole pine across Montana's forestlands. Douglas-fir, which has been under duress from spruce budworm for more than a decade, is under dramatically increased risk of a Douglas-fir bark beetle outbreak. The fuels buildup resulting from damage caused by these pests over the past two or so decades has increased the risk of severe wildfire behavior. Some forest owners have been able to reduce fuels—yet, their forests remain at risk if they are anywhere near federal lands, which are at the highest risk.

The fuels buildup on federal lands has increased the risk of severe wildfire behavior that can easily spill across property lines and impact private lands, even if the landowners have implemented quality stewardship plans! Thinning and fuels reduction on federal lands has dropped significantly due to litigation and other factors, all contributing to the closure of mills. The entire forested landscape (public and private) is necessary to provide a viable forest products economy. If the largest forest manager suddenly stops supplying a sustainable wood source, the minority landowners will be severely impacted by the loss of the wood products infrastructure. The lack of thinning on federal lands has impacted the ability of the private forestland owner to manage his forest.

This is an interconnected world, or a chicken-and-egg scenario. The catastrophic loss of a forest to wildfire or insect outbreak, and the loss of economic return, go hand-in-hand. The loss of wood products infrastructure impacts the owner's ability to manage the threats to forest health, and to reap a return on his investment, thus eroding the security of his forestland. ■

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Down on the Tree Farm

MAY

- ✓ This is a good month to finish your fire season preparations. Learn the restrictions and requirements for your activities. Take your fire extinguishers in for maintenance. Sharpen your firefighting hand tools and check your spark arrestors.
- ✓ See if your fire map is up-to-date and accurate. Include the locations of structures, access roads, water sources, existing fuel breaks, power lines, cell towers and turn arounds. Make a few copies to distribute to the initial attack firefighters.
- ✓ If you're harvesting this year, check your logger's fire equipment as carefully as you check your own. Request a "courtesy" inspection from your fire protection agency prior to fire season.
- ✓ Look for opportunities to construct an engine pump chance or helicopter dip site on your property. Make sure you know the location of the nearest water source and how an engine can get to it. Fill your stationary or mobile water supply tanks. Make sure they'll be ready at a moment's notice.
- ✓ Introduce yourself and your forestland to the local law enforcement and fire patrol officers. Try to build a relationship before you need their help.
- ✓ Now that you're ready for fire season, take time to go fishing in your favorite stream!

JUNE

- ✓ Complete your road maintenance and improvement projects while there's still moisture in the soil.
- ✓ Chain saws make good graduation gifts! Convince your children or grandchildren to "practice" using it to accomplish an unfinished project on the property.
- ✓ Many family reunions happen in the summer months. It's a good opportunity to admire completed projects and "infect" your successors with pride. While you're there, be sure to take a family photo.
- ✓ Support your fellow family forestland owners by attending one of the following conferences:
 - The Forest Landowner Conference with the Montana Forest Stewardship Foundation and Northwest Management, Inc. on Friday, April 21 in Helena. Register by April 14 at: foreststewardshipfoundation.org under Events.
 - The Washington Farm Forestry Association annual meeting and Tree Farm tour, May 4-6 in Bothel and Woodinville. Look for more details at: wafarmforestry.com.

- The Oregon Small Woodlands Association annual meeting and Tree Farm tour, June 15-17 in Florence. Look for more details at: oswa.org.

- ✓ If you plan to burn in the fall, make sure you have a plan, necessary permits, your help and your equipment in place now. You'll want to be ready to "light" as soon as the conditions are right. Don't forget to notify your local fire protection agency even if you're not in fire season.

JULY

- ✓ Measure your permanent inventory plots to give yourself the satisfaction of "seeing" your trees grow. Another way to appreciate your progress is to take periodic photos at established photo points. Often the permanent inventory plots double as permanent photo points.
- ✓ Include large woody debris, snags and understory plants in your inventory. This information can help you evaluate the wildlife habitat on your property. After young birds have fledged, create nesting cavities, roosts, platforms, snags or nesting boxes for future use.
- ✓ Look at your forestland on Google Earth's software from time to time.
- ✓ Monitor weather reports and be ready to respond if lightning is in the forecast. Patrol your forestland and report any smokes that you encounter to the local responders. The phone number should be programmed into your cell, just in case! Find fires early and keep them small until firefighters arrive.
- ✓ Don your armor and pick blackberries for a special treat!

FOR MORE INFORMATION...

check out these favorite websites and publications:

- adminrules.idaho.gov/rules/2013/20/0401.pdf (Idaho fire prevention requirements)
- dnrc.mt.gov/divisions/forestry/docs/fire-and-aviation/prevention/rulesregs.pdf (Montana fire prevention requirements)
- oregon.gov/ODF/Fire/Pages/FirePrevention.aspx (Oregon fire prevention requirements)
- dnr.wa.gov/ifpl (Washington fire prevention requirements)
- mylandplan.org/ (management planning and mapping)
- knowyourforest.org/learning-library/non-timber-forest-products
- wa-dnr.s3.amazonaws.com/publications/fp_slfo_pnw630_basic_tech.pdf (inventory techniques)
- fs.fed.us/eng/rsac/invasivespecies/documents/Photopoint_monitoring.pdf
- google.com/earth
- driscolls.com/recipes/view/3068/Perfect-Blackberry-Pie

Down on the Tree Farm is a compilation of all of the excellent tips contributed to this column by experienced volunteers over the last 15 years. Suggestions are always welcome and may be sent to the editor at: annewithnww@gmail.com.

The Unusual Suspects: Using Laws and Regulations to Improve Security

By **LESLIE CLARK**

For the forestland owner concerned about security of her land, state laws and regulations protect ownership interests and provide immunity against legal liability. This article discusses the legal principles of trespass and recreational use immunity, and discusses courtroom means of resolving disputes regarding rightful ownership. Throughout, the article also offers real-life examples, tips and insights into using applicable laws and regulations to avoid or at least reduce security concerns for the forestland owner.



Trespass

Forestland owners frequently cite trespass as a major security concern. Trespass is commonly defined as entry onto another's land without permission. For example, an adjacent landowner might allow a prospective purchaser to view their property by passing through your property; if done without your permission that is trespass.

Under the eyes of the law, trespass can be characterized as either a criminal act or a civil action. When characterized as a criminal act, the relevant



PHOTO COURTESY: ADOBE STOCK

Posting visible signs at periodic intervals along property lines may help owners claim damage in case of trespass.

county steps in to pursue criminal charges against the offender. When characterized as a civil action, the landowner files a lawsuit against the offender to prevent the offender from repeating the trespass and to obtain compensation for property damage. When a landowner has concerns that his/her property is at risk of trespass, or has been the target of trespassers, the law responds in two primary ways: (1) aiding in preventing trespass and (2) seeking redress against those who have committed trespass. Each is discussed below.

Preventing trespass. State laws and regulations help guide forestland owners who want to prevent trespass. Many states use deterrence as a tool by imposing punitive damages—damage amounts that are higher than the actual value of the damage suffered. For example, in Oregon, in civil lawsuits alleging trespass, the trespasser faces liability for three times the actual damage for intentionally removing

timber or for injuring the land itself. The states vary, though, on when a landowner is entitled to recover punitive damages. In Washington, treble damages are only available if the landowner proves that the trespass was willful rather than casual or involuntary. Similarly, in Montana, the trespasser is liable for treble damages only for willful, wanton, or malicious acts of trespass. To maximize the deterrence value of states that allow punitive damages for trespass, forestland owners should post visible signs at obvious and regular intervals along property boundaries warning “no trespassing,” “keep out” or similar messages.

In addition to standard no trespassing signs, some states' legislatures have broadened the types of visible warnings deemed sufficient to keep trespassers from entering private forestland. As all forestland owners know, no trespassing signs are frequently torn down or vandalized, cre-

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ating a cost burden on landowners to replace them. During its last several sessions, the Washington State Legislature considered a bill that would allow landowners to mark property boundaries with vertical stripes of orange fluorescent paint in lieu of actual signage. Although the bill passed the state legislature in 2014, the Washington governor vetoed it; legislators have continued to propose similar bills in subsequent years. Idaho has already enacted such a law: landowners may use standard signage but may also use an alternative of painting trees or posts with 100 square inches of fluorescent orange paint to warn against trespass. Oregon and Montana also allow landowners to warn against trespass using blazes of fluorescent orange paint, in addition to or in lieu of standard signage.

As wireless technology improves, the use of trail cameras has increased because landowners can access the data conveniently and remotely. Because another article in this newsletter features the use of trail cameras, this article limits its discussion to an introduction to the associated privacy laws of which forestland owners should be aware. Some states require that the subject of a recording give informed consent before being filmed. Washington serves as an example. If the recording is made without such prior consent, the landowner puts herself at risk for criminal prosecution from the victim of the unlawful recording. To prevent such risk, a forestland owner using trail cameras should employ two best practices. First, inspect the camera angle to ensure that filming occurs on the owner's land. This is because prior consent is not required when the recording captures a criminal act. If the camera angle ensures that only acts of trespass are captured, the landowner has spared herself of potential liability. Second, post signs advising of the presence of cameras, which thwarts protests that the recording occurred without the

knowledge of the film's subject.

Seeking redress for trespass. For forestland owners, trespass remains a common problem despite best efforts to prevent it. As noted above, the law provides two means of seeking redress for trespass—via criminal prosecution or via civil litigation. From a practical perspective, relying on the criminal justice system to prosecute for trespass will not bring much satisfaction to the wronged forestland owner. Even if the landowner has evidence identifying the trespasser (such as camera footage), unless the trespasser committed some other more egregious crime while trespassing, a county prosecutor is unlikely to have the time, budget or political will to pursue a criminal charge for trespass.

For that reason, trespass is far more often remedied through civil litigation rather than criminal prosecu-

tion. Even in civil litigation, trespass can be frustratingly difficult to prove. For example, in Washington you must prove the following four elements to prevail in a civil lawsuit alleging trespass: (1) an invasion affecting an interest in the exclusive possession of property; (2) the invasion must be intentional; (3) reasonable foreseeability; and (4) substantial damages. Thus, in that state, even the prospect of civil litigation must first meet a significant threshold: unless the trespasser has caused substantial damage to the land, the forestland owner will not ultimately win her lawsuit against the trespasser or obtain an injunction to prevent future trespasses. Accordingly, the Washington forestland owner should consider how to prove substantial damages from trespass, such

—Continued on next page—



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as damage done to fences, livestock or timber.

Recreational use immunity. In the context of trespass discussed above, you, as a forestland owner, have placed your attention on preventing further unauthorized access of your property and proving the liability of the trespasser. The principle of recreational use immunity addresses the opposite concerns: protecting you, the forestland owner, from liability for injuries to recreational users of your property.

In general, recreational use immunity statutes apply to landowners who open their lands for recreational use and protects the landowners from liability for unintentional injuries to recreational users that occur on their land. As the demand for outdoor recreational space has exceeded the supply of public lands to serve the demand, recreational use immunity statutes have become commonplace; Idaho, Montana, Oregon, and Washington have each adopted a statute formalizing the principle. In Washington, like in many other states, the legislature expressly intended that the statute would incentivize resource landowners to open their property for recreational use, announcing that the statute “would encourage owners ... to make [land] available to the public for recreational purposes by limiting their liability toward persons entering thereon.” These statutes also broadly define what it means for a use to be considered recreational. Idaho, for example, has adopted the following laundry list of recreational uses: hunting, fishing, swimming, boating, rafting, tubing, camping, picnicking, hiking, pleasure-driving, the flying of aircraft, bicycling, running, playing on playground equipment, skateboarding, athletic competition, nature study, water skiing, animal riding, motorcycling, snowmobiling, recreational vehicles, winter sports and viewing or enjoying historical, archeological, scenic, geological or scientific sites.

So, how can a forestland owner

take advantage of the liability immunity provided by recreational use immunity statutes? Each state carries its own formulation of the immunity.

In **Washington**, to be immune from liability for injuries suffered on the owner’s land, the landowner must establish that the land (1) was open to members of the public, (2) for recreational purposes, and (3) without any fee being charged. In addition, because the purpose of the statute is to open land to the public which may not otherwise be open, the landowner must also establish that he or she holds continuing authority to close the land to the recreating public but has elected not to do so. Finally, where the land is held open to the public for some purpose other than recreational (e.g., for access) the immunity does not apply.

Oregon’s recreational immunity statute shields both private and public landowners from liability for injury occurring during recreational use of the land. Like Washington, Oregon courts have emphasized that the immunity applies only if the landowner does not charge anything to use the land. For example, in a 2009 decision, the Oregon Supreme Court held that the owner of park land was not immune from a personal injury claim brought by a bicyclist when the bicyclist had paid a fee to camp in a separate area of the park. Oregon courts have further narrowed the recreational use immunity by holding that the employees of a landowner are not immune from liability to injuries they negligently cause to recreational users. Thus, in Oregon, the landowner can become liable indirectly through principles of employer liability.

As in Oregon, **Montana’s** recreational use immunity protects both public and private landowners who hold out their land for recreational purposes. The Montana Supreme Court has confirmed that the immunity reaches beyond protections for hazards of the land itself, but to hazards encountered while on the land. Specifically, after a man was mauled

to death by a grizzly bear while hunting on Montana state lands, his widow filed suit against the state of Montana, asserting that the recreational use immunity statute did not shield the state from alleged mismanagement of wildlife on the land. The state Supreme Court disagreed, holding that the state of Montana was immune from any negligence associated with the land itself or with the conditions a recreational user experienced while on the land.

The **Idaho** recreational use immunity statute extends broader protections to landowners who hold their land open for purposes of recreational use. Not only is the landowner immune from personal injury resulting from the use of the land, but the recreational user can also be held liable to the landowner for damages the user causes to the land, livestock or crops.

Finally, the recreational use immunity only protects landowners from liability for unintentional injuries. The landowner receives no protection from intentional injuries, such as laying traps for dirt bikes after holding the land’s dirt trails out for unrestricted use. Further, the landowner is not immune from liability for injuries resulting from a dangerous property condition that is known to the landowner but has not been posted with warning signs. For example, if the landowner knows of an uncapped, abandoned well site on her property, she must either eliminate the hazard or post conspicuous warning signs. If she does neither, and injury results, she may be held liable.

Resolving disputes regarding land ownership

As discussed above, trespass concerns and recreational use immunity statutes address injuries to land and persons, but they do not address potential injuries to a forestland owner’s title to her property. Title injuries, although less sudden and obvious than a trespass or an instance of injury during recreational use, form a substantial potential security con-

cern to the forestland owner who, if unsuccessful on a title claim, stands to lose ownership of her land. This final section of the article addresses two of the most common injuries to land title: (1) loss of title by adverse possession and (2) loss of control by creation of a prescriptive easement.

Adverse possession. The principle of adverse possession is, in effect, a loophole to the prohibition against trespassing on the property of another. Sometimes referred to as “continuous trespass,” adverse possession allows someone other than the land’s true owner to take title to the land based on the nature and duration of the interferer’s use. The person claiming to have taken title to the land bears the burden of proof, and most states have a similar test for establishing adverse possession. The claimant’s possession must be:

- Hostile (against the right of the true owner and without permission);
- Actual (exercising control over the property);
- Exclusive (in the possession of the trespasser alone);
- Open and notorious (using the property as the real owner would, without hiding his or her occupancy); and
- Continuous for the prescribed length of time set by the state’s statute. (Idaho: 20 years; Montana: 5 years; Oregon and Washington: 10 years)

Adverse possession frequently results from misplaced fence lines between properties. As a hypothetical example, if a fence separates two properties (“Parcel 1” and “Parcel 2”) but does not run along the true property line, a portion of Parcel 1 might be situated on Parcel 2’s side of the fence. If the owner of Parcel 2 mows and otherwise maintains the land up to the fence line (thus, mows all of Parcel 2 and the strip of Parcel 1) for the prescribed length of time, the owner of Parcel 2 can acquire legal title to the strip of Parcel 1 on her side of the fence.

Adverse possession is discouraged;

the trespassing claimant must prove every element of adverse possession to take title from the true owner. For that reason, if the true owner learns of the encroachment before the prescribed length of time has elapsed, the true owner can thwart the adverse possession claim. If the trespasser will not voluntarily surrender possession of the disputed land, the true owner can nevertheless end the adverse possession claim by granting a “permissive use license” to the trespasser. In such a license, the true owner expressly gives the trespasser revocable permission to use the land in question, thus defeating the adverse possession element of hostility.

Finally, some states afford greater protection against adverse possession when the land in question is forestland. For example, in Washington, when a claim of adverse possession seeks to establish title to forestlands, in addition to proving the typical elements of adverse possession, the claimant must also prove that she “made or erected substantial improvements, which improvements have remained entirely or partially on such lands for at least ten years.”

Prescriptive easement. In addition to regularly inspecting property for continuous trespassers whose presence may give rise to a claim of adverse possession, owners of forestland should also remain vigilant against title claims yielding a prescriptive easement in favor of someone other than the land’s true owner.

A prescriptive easement is an easement that is created by use of someone other than the property owner. Such an easement most often arises when a trespasser uses a road over the true owner’s property without an agreement or recorded authorization to do so. While adverse possession establishes title to the underlying property, prescriptive easements establish the right to use the property. As with adverse possession, the trespasser bears the burden of proving that a prescriptive easement has arisen. The elements that must be proved are like

adverse possession except that, for a prescriptive easement, the trespasser need not prove that she is the only user of the easement. Rather, the trespasser must prove that her use is uninterrupted by anyone else’s use, including the true owner’s. Finally, like the strategy for preventing adverse possession, a claim to a prescriptive easement can be defeated by the true owner timely granting permission for use of the roadway at issue—a use that began with permission cannot ripen into a successful claim for prescriptive easement.

Conclusion

The various states’ laws and regulations afford important security protections for the forestland owner. With vigilance and preparation, the landowner can protect herself from trespass concerns, avail herself of recreational use immunity and prevent injuries to the title of her land. ■

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Law Enforcement's Role in Forest Protection

By **DEPUTY STEVE LESLIE**

When forestland owners think of a threat to their land, it is most often wildfire, beetles or drought that first come to mind. A primary concern that is often overlooked is the damage caused by vandalism, theft and reckless actions.



I have worked in law enforcement for 15 years; for the last eight years, I have worked as a forest deputy for the Klamath County (Oregon) Sheriff's office. Over this time, I have seen almost anything you can imagine in the forest. I have been involved in investigations of homicides, arsons, marijuana grows, assaults and many other property crimes that include trespassing and littering.

Both public and private forestland has always had a natural draw for recreation, as well as to seek seclusion for various reasons. Access is gained to private forestlands by either non-restricted public access or by individuals who cut locks and drive onto property without permission. Those individuals who gain access through illegal means are often not concerned about causing damage. Forestlands

that are frequently visited by the landowner or have active harvesting activities are less susceptible to this damage and other illegal activities.

One of the problems law enforcement is dealing with, both on private and public lands, is marijuana grows. As several states in the Northwest legalize both recreational and medical marijuana use, the demand for the product is skyrocketing. Even though it may be legal to use, it is up to the individual states and counties to decide if growing the product is permitted. With a return of up to \$2000 a pound, the temptation to make a substantial amount of money can cause people to focus on the benefits and disregard the risks of these activities.

There are several factors that illegal growers look for when picking a site to grow. Obviously the first is location. Growers want to be out of sight of the public, as well as camouflaged from aircraft that can easily spot plants in the open. These plants require substantial water, so growers look for areas that have streams and other water sources nearby. These individuals will also look for areas that are a significant distance from a well-traveled road or deep behind a locked gate.

As a landowner, how does this affect you? The type of people involved with these activities range from the everyday person to those involved in drug trafficking organizations who are willing to kill to protect their product. If you are lucky and don't encounter these individuals, there is still the potential for extensive damage to your property.

During these illegal operations, trees are cut to open tight canopies to allow light to enter, as well as to construct living areas. Poison in the form of herbicides and rodenticides are used to control the environment around the plants. Large amounts of fertilizers are used to support growth of the marijuana plant. These products cause devastation as they wash into streams and are consumed by innocent animals that unknowingly encounter them.

Everything that is packed in by the growers, from food to the chemicals they use, is left behind when the crop is harvested. This leaves the property owner with a very expensive clean up and land that may be permanently damaged. In addition, marijuana grow areas are often protected by anything from individuals with firearms to large traps designed to cause severe injuries.



Isolated campsites, discarded herbicide containers or irrigation materials may indicate that an illegal marijuana grow is nearby. If you encounter suspicious activity, leave the area immediately and provide a report to law enforcement.

PHOTOS COURTESY: U.S. FOREST SERVICE

expensive. I have seen very large piles of tires, 10 laundromat-size washing machines, boats and every type of vehicle you can imagine dumped in the forest. These individuals weigh the risk of hauling their trash to the forest over the cost of dump fees at the landfill and, unfortunately, choose an illegal option.

As a landowner, it is important that you report these dumping sites to law enforcement. Almost every dump site has some sort of evidence that leads back to the responsible party who dumped the items. I have hauled garbage bags into the landfill and spread them out to find everything from mail to a receipt with credit card information on it. Often the owner of the garbage is surprised when you arrive at their door and ask them to explain how their items ended up where they did. The person responsible is then charged with a crime.

Some landowners who do not visit



PHOTO COURTESY: STEVE LESUE

Dump sites often contain evidence leading back to the responsible party. For your personal safety, it's recommended that you report suspicious activity to law enforcement for investigation and follow-up. Crimes are often solved by putting several pieces of information together.

their property on a regular basis are surprised when they visit and find squatters who are set up like they own the land. Many individuals who have lost their jobs, or have chosen to live a transient lifestyle, buy a cheap travel

trailer or motorhome and set up in a secluded area. While some of these individuals are not a risk, others may go to extremes to keep from being identified.

For obvious safety reasons, it is best that the landowner not contact these people alone. Though safety is always of primary concern, photographs of license plates or any other identifiable information can be incredibly useful in helping law enforcement get an idea of who they might be dealing with. Often there is a reason these people want to stay out of sight.

When it comes to trespassing or timber theft, one way to assist law enforcement is to mark your boundary line. It is difficult to have good forest management if boundaries are not clearly identified. Appropriately marked lines are the best prevention against trespass and timber theft. Good lines also help your relationship with adjacent landowners by reducing boundary disputes.

If you can, try to visit your property on a regular basis. The earlier an issue is identified and law enforcement is notified, the greater the likelihood that they will be able to solve the issue. I know of many landowners who allow local residents to use their property for recreational purposes in exchange for them reporting any

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issues they find while on the land. This seems to work very well, especially for the landowner who lives out of the area and is unable to check it often.

Trail cameras are also an inexpensive way to protect your property. When placed on roads in and out of the property or in an area that has higher value (such as where logging equipment is located), these cameras serve as a 24-hour watchman. Trail cameras do a good job of documenting individuals who enter the property with either still photos or video, and I have seen many cases solved by information obtained from a trail camera.

When you do encounter an incident on your property, keep in mind the unfortunate changes we see today. Shootings and physical violence are on the rise nationwide, and these are typically only escalated by an unexpected confrontation. While it is a common reaction to be angry after witnessing someone damaging, stealing, or trespassing on your property, remember that law enforcement should be notified to ensure the best outcome. As discussed above, you never know who you may encounter in the forest and the best way to assist law enforcement is to be a good witness. Document as much information as possible. As they say, "A picture is worth a thousand words." Most cell phones have cameras; if you feel it is fully safe to take pictures, then take them.

A proactive step is to build a relationship with local law enforcement before something happens. My phone is full of numbers of landowners in



PHOTO COURTESY: STEVE LESLIE

Landowners can benefit from building relationships not only with their neighbors, but with local law enforcement officers.

my area. I encourage them to call me no matter how small an issue or concern seems to be. Often crimes are solved by putting several pieces of information together. Something that may seem unimportant to you at the time may be just the piece that law enforcement has been lacking. If you have a chance, get to know the law enforcement officers that cover your area before you need to contact them about an issue.

Our forests are a significant and valuable resource in the Northwest. In addition to landowners keeping a watchful eye on their property, utilizing law enforcement helps to ensure

that the landowner, their employees and the land is kept safe from numerous threats. ■

STEVE LESLIE has been working as a Deputy Sheriff for 15 years, the last eight as a Forest Patrol Deputy. He patrols all U.S. Forest Service and Bureau of Land Management property in Klamath County. His priorities on patrol are keeping the public safe and enforcing laws related to resource protection. He is also a Fire Investigator, Marine Deputy, Emergency Medical Technician and Special Response Team Member. Steve can be reached at 541-891-7992 or sleslie@co.klamath.or.us.



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Trail Cameras: Serious Fun in the Woods

By ED STYSKEL

Trail cameras—also called camera traps, game cameras or scouting cameras—have become a popular tool for viewing wildlife and monitoring property. They are efficient in power consumption and photo storage, easy to use, programmable for various purposes and affordable for potential users.



Battery-powered trail cameras can fill the gap in monitoring property far from the power lines and wireless signal required by home surveillance cameras. Trail cameras can count, time, identify and photograph the sta-

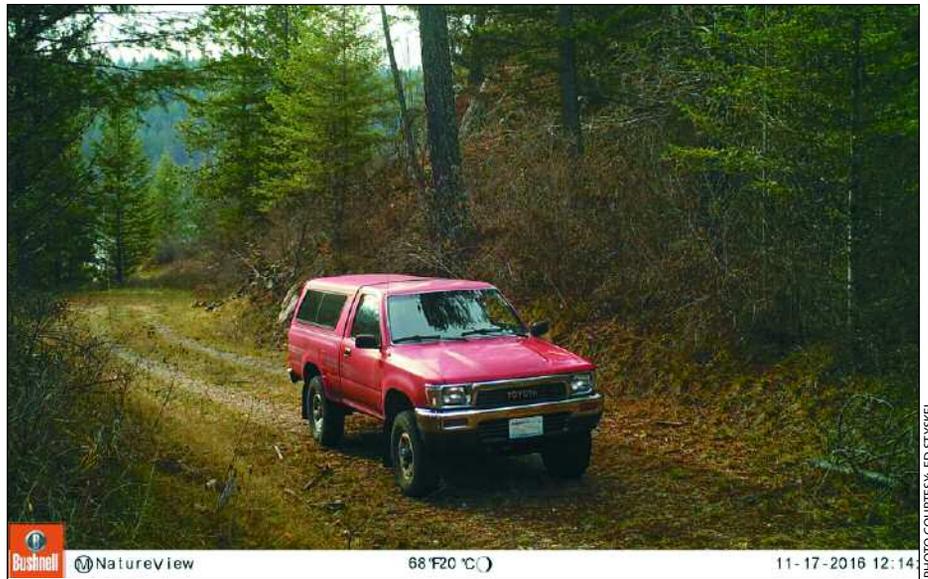


PHOTO COURTESY: ED STYSKEL

A motion-activated trail camera captured this still photo of a vehicle on a private road. The camera was aimed diagonally to the road so that moving objects will stay in the detection zone long enough for a triggered image or video. The camera was about 35 feet away.

Assistance for Forest Landowners



Oregon Department of Forestry
<http://www.oregon.gov/ODF/>
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College of Forestry

Forestry & Natural Resources Extension
<http://extensionweb.forestry.oregonstate.edu/>
Connect with a statewide support network.



Know Your Forest
<http://www.knowyourforest.org/>
Find information to manage your forestland.

Find a Stewardship Forester

<http://www.oregon.gov/ODF/Working/Pages/FindAForester.aspx>

tus or behavior of animate and inanimate objects. Everyone, including absentee or distant landowners, now have a tool to record things on their parcel without being continuously on the site.

Trail cameras can be a time-saving and relatively inexpensive way to monitor property, plant phenology (annual timing of developmental stages), weather conditions and biological resources. One critical decision for all trail camera applications is whether the photo-captured information is needed immediately for a user's quick response, or can be delayed until the camera is refreshed or retrieved. Camera placement and features also affect successful use.

Property security

Trespass, littering, damage, pollution, theft and poaching. Human, livestock or pet animal trespassers can be recorded by a no-glow, motion-triggered trail camera. When their actions are documented with video there is little doubt about what they did. With luck, time-lapse trail cameras might

even capture subjects too distant to be triggered by a camera's motion sensor. Photos lead to more successful prosecutions.

Contractor compliance. Log loads photographed by a motion-triggered trail camera can be compared to buyer tallies. Contractors paid by the hour could be monitored at the job site or staging area. Protected features or areas can be monitored during tree felling, tree thinning, pesticide spraying, fuel treatment or other activities.

Vehicle use. Motion-activated trail cameras can tally vehicles by type, time of day, uniqueness (e.g., license plate or unusual markings), occupants and behavior. Even the speed of a vehicle caught by a trail camera video could be estimated with calibration.

Plant phenology

Forest product harvest. Some medicinal, edible, botanical, herbal and wildcraft forest products should be harvested at the optimum time for freshness or potency. You can remotely follow the growth of almost any plant species with a cellular time-lapse trail camera so you'll be ready for harvest. A simple time-lapse trail camera could identify the time interval between plant growth stages for prediction in future weather years, such as by using the "growing degree-days" concept (see Footnotes on page 18).

Weed control. Some noxious or invasive plants are especially susceptible to control at specific stages of their growth. For example, small patches of Dalmatian toadflax (*Linaria dalmatica*) can be controlled over time by hand-pulling and bagging the flowering stems just before seedfall. A cellular time-lapse trail camera could monitor and notify you about the plant growth stage for effective control.

Weather conditions

Prescribed burning. Time-lapse trail cameras can indicate temperature, ground surface moisture and wind (via in-frame ribbon flagging or wind-sock) for the optimal start and end of



PHOTO COURTESY: ED STYSKEL

The uppermost flower stems of St. Johnswort, a dietary and herbal supplement, provide the highest quality product when flowers are a mix of buds and blossoms. A time-lapse trail camera programmed for one trigger per day at noon captured the optimum dates for harvest between June 28 and July 3. The trail camera, also programmed to take motion-activated photos, caught a deer and a missing yellow blossom (arrow) on July 5.

pile or broadcast burning. Trail cameras have been used in Texas to provide a firsthand view of prescribed fire movement, rate of spread, ambient air temperatures, flame lengths, flame residence times, plus ember production and threat to unburned fuels during the fire. Knowledge of on-site fire behavior can help estimate the survivability of residual trees.

Winter logging. Cellular time-lapse trail cameras can record snow cover via a depth gauge included in the photographed area. Ground freezing can

be interpreted from interval temperature readings by the camera. Time-lapse trail cameras can document the interval readings of almost any measuring instrument that has a large visible display but no memory (e.g., transparent rain gauge and thermometer, if not a camera feature).

Water level, flow-rate and expanse. Time-lapse trail cameras can be used for a casual estimate of the depth and expanse of standing or moving water bodies. For more accurate measure-

–Continued on next page–

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ments, a commercial or homemade stream and staff gauge could be included in the photo frame.

Biological resources

Biological species inventory.

Knowing which animals are present on your property can be fun, educational and informative for property management. A motion-activated trail camera could verify the presence of an animal, suspected from signs like an underground burrow or tree damage. Small critters can be monitored by trail cameras capable of close focus (see focus distance discussion below). Even some butterflies, moths and dragonflies may be identified in this way. Where legal, baiting with lures (foods, minerals, scents, visual, audio or water) will improve the odds of an encounter.

Nesting activity and success.

Motion-activated trail cameras can monitor bird behavior, nesting success and the role of predation at active nest sites. **CAUTION:** This use requires extreme care to avoid disturbing the nesting animal. Delay the camera installation until stressful weather conditions, such as rain or cold, improve and use a tripod or tree to mount the camera rather than hammering a post. Resurrect trampled vegetation leading to the nest so that predators don't investigate your trail or scent. Unless you can observe nest activity from a hidden distance, don't return to the camera for at least 30 days to allow the progression of nesting.

Nest predators. Nesting birds are vulnerable to ground and aerial predators that prey on eggs, nestlings and adults. You might discover which predators are on your parcel by plac-

ing an artificial nest on the ground or under a bush, then stocking it with a few chicken eggs and aiming a motion-triggered trail camera to record the action. Photo evidence of domestic dogs or cats preying on the nest should be an incentive to control their free-roaming status.

Plant and animal phenology.

Scientists around the world are monitoring plant and animal phenology to study the rate and effect of climate change. Project Budburst (www.budburst.org) welcomes citizen volunteers to report the first leaves, flowers and fruits of plant species in their area. Once you find an early growing individual of a species needing data, your time-lapse trail camera could follow the growth progression without any further human presence. The National Phenology Network Nature's Notebook is a similar effort that also includes animals and some insects (www.usanpn.natures_notebook.org).

Camera placement

Ideally, trail cameras should face a northerly (best) or southerly direction since the other two orientations may produce sun flare and false triggers. Unless a specific object is the target, aim a camera diagonal to any expected pathway so that detection time is increased. Be sure that an accurate date and time are programmed during setup.

Visible human footprints or trimmed branches can draw attention to a security camera. In snow country, a trail camera should be installed before snow blankets the ground, and batteries plus SD card should last to avoid replenishment before the thaw.

Disguise the trail camera and its mount so that it blends with the back-



PHOTO COURTESY: ED STYSKEL

Any trail camera with the DIY mount can screw into a tree or bolt onto a lightweight metal fence post. Even though the camera is located behind a locked gate and some distance off the road, with no camouflage it is still vulnerable to thieves or vandals.

ground. Camouflage can range from tree bark glued to the camera body (or its protective metal case) to installing the camera inside a birdhouse or hollowed stump, or hanging a camera at least 10 feet above ground on a tree bole or limb. Any disguise must not obscure the lens, flash and sensors. Wind can move leaves, twigs and branches to cause false triggering or exposure whiteout. Some camera users install two cameras at a site, facing in opposite directions. Other users mount a dummy trail camera in plain sight and aim a camouflaged real one at the dummy. One online trail camera retailer sells used, inoperable trail cameras to serve as fakes.

Camera features

Modern trail cameras are technological marvels that improve with each new version. The features described below vary in capacity or quality by manufacturer and model. User familiarity with camera features, plus practice in using them, will help accomplish the intended purpose.

Trigger and recovery speeds. Trigger speed is the amount of time from when a camera first detects motion until it photographs the scene. A slow trigger may allow a moving object to

Footnotes

Product names used herein are only for clarification and do not represent endorsement by the author or *Northwest Woodlands* magazine.

Find the document titled, "Using Growing Degree Days to Predict Plant Stages" from Montana State University Extension here:
www.store.msuextension.org/publications/agandnaturalresources/mt200103ag.pdf

partly or wholly exit the frame. A quality camera will have a trigger speed of 0.5 second or less. Recovery speed is the amount of time a camera needs to re-arm for a second triggered photo; some cameras allow still photos to be triggered in as little as one second apart.

Detection zone. This is an imaginary cone-shaped area that is narrow at the lens and widens as distance increases away from the camera. The detection range is the maximum distance at which a camera detects motion to trigger a photo. Some cameras can detect out to 120 feet.

Focus distance. Nearly all trail cameras have a fixed lens that focuses from some minimum distance out to infinity. Sadly, few manufacturers declare what their minimum distance is. I'm aware of only four trail cameras with close-up focus: the Wingscapes BirdCam Pro and Wingscapes TimeLapse Cam will focus as near as six inches; the Bushnell Natureview HD focuses as close as 18 inches; and the Moultrie M-880 Trail Cam close focus is about 24 inches. Satisfactory photos in low light or darkness are also influenced by a camera's activated flash: too close and the flash may overexpose everything as a "whiteout." Generally, objects at least five feet away remain in focus with an acceptable exposure.

Image resolution quality. High-definition (HD) video is important for sharp images in twilight or darkness. A trail camera's still photo sensor should be capable of at least five megapixels.

Flash. There are three types of trail camera flash: incandescent, low-glow infrared and no-glow (or black-flash) infrared. Incandescent flash produces white light visible to humans and wildlife, so it is not suitable for security or wildlife purposes. Low-glow produces a split-second soft red glow that is slightly visible in darkness, so it too is undesirable for security uses. No-glow is invisible to humans and most wildlife but is more expensive. Some trail cameras can limit flash bright-

ness to avoid exposure whiteout when illuminating a close object in low light or darkness. If the camera is not programmable for flash brightness, some users experiment with opaque tape to partially cover the flash for a satisfactory exposure.

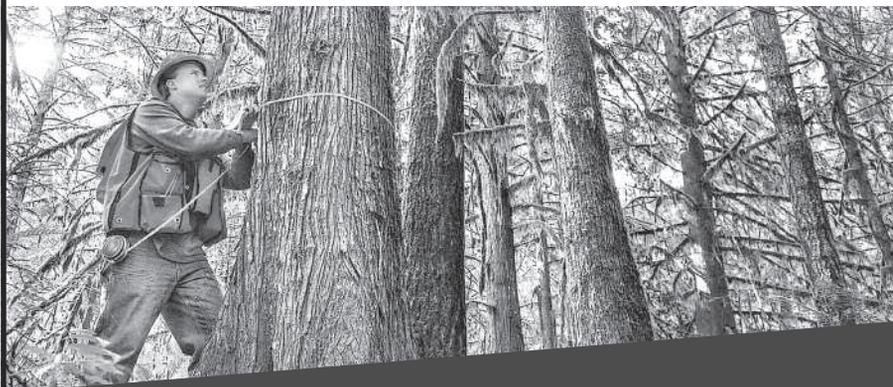
Sensitivity. A Passive Infrared (PIR) motion sensor detects the infrared (heat) spectrum of light. Many trail cameras permit adjust-

ment of sensitivity to account for a big or small difference between ambient and target-object temperatures.

Trigger mechanisms. Cameras can be programmed to trigger by motion or by time of day (time-lapse). The delay time between individual triggers can be adjusted to suit your purpose.

Capture mode. Depending on the

—Continued on page 31—



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Providing a Secure Tree Farm Operation

By **REX STORM, CF**

The forest operation on a tree farm is a potential point of exposure to security losses.



Logging and other in-woods forestry operations are prone to a wide range of accidental, negligent, malicious, unauthorized or unforeseen losses to legitimate forest management. Small landowners, who hire contractors to conduct work in Northwest forestlands, must anticipate and manage the contracted work amid potential security risks specific to each project.

A forest business that fails to adequately protect its operations with appropriate security precautions could face unnecessary and costly timber losses, equipment damage, theft, vandalism, trespass, liability or insurance claims. Plus, remotely situated logging equipment remains a visible target for those unscrupulous detractors who seek personal gain or express their dislike of tree harvesting



PHOTO COURTESY: REX STORM, AGL

Logging and other in-woods forestry operations are prone to a wide range of accidental, negligent, malicious, unauthorized or unforeseen losses.

via criminal acts against equipment and forest assets.

Today's forestland owner can minimize their exposure to losses by considering possible risks and then implementing appropriate security precautions. All assets and operations of the small landowner should be covered by

practical security measures—including the tree farm's timber, roads, gates, property boundaries, improvements, buildings, easements and especially the liability created by hiring a contractor.

Managing a forestland owner's risk by taking appropriate precautions is the answer to preventing runaway security losses. It just makes good sense to prepare your tree farm business to deter costly security problems that could upset a well-intentioned forestry project.

Top security precautions for tree farm projects

The tree farm landowner should consider these precautionary measures to help curb potential security losses on their planned operation.

Business casualty is well-managed.

Managing the tree farm's exposure to losses demands continuous business planning. As it turns out, the business (office) aspects of contracting a harvest operation are just as important as the production (field) aspects of logging. To avoid unacceptable exposure and costs resulting from casualty loss-



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es, a business must first identify those potential losses (see Watch Out lists on page 23). Then, the business must plan, and invest in, purpose-built business practices, procedures, training, technology and insurance that would manage or eliminate those potential losses.

Plan for secure operations. Prepare a written security plan for how the forest project will be kept secure, including the contractor operations, property boundaries, road easements and log load accounting. Most tree farmers have thought of their business plans, but the important security plan may be an overlooked chore. Address typical security risks and define how to manage them to lessen exposure and reduce losses in all aspects of the operation. Smart risk management reduces loss and may involve assistance from a consulting forester, insurance agent or attorney.

Written contracts. A written con-

tract provides security through the certainty of agreements made. It's good business to communicate in a written agreement the terms of harvest, roads, payment, schedules, cut versus leave trees, posted boundaries, liability, regulatory compliance and other operations prior to beginning a forestry project. A written contract is an important document that describes specific responsibilities of each party in a forest operation. A contract lends security to all its parties: landowner, contractor and purchaser.

Insurance. An essential security tool for a small forestland owner is the wise procurement (or contractor proof) of insurance coverage to limit financial exposure to catastrophic losses. An effective loss-control program is the best inoculation to keep any big loss covered. The tree farmer should assure that the contractor has appropriate coverage amounts of insurance for: property, casualty and

fire (logger's broad form liability); workers' compensation; vehicle comprehensive and liability; and commercial trucking. Furthermore, for large projects, a tree farmer may consider requiring the contractor to provide bonding to cover performance.

Timber theft prevention. Harvesting operations demand attention to assure that timber value is securely handled as agreed in the contract—

—Continued on next page—

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during cutting, yarding, processing, sorting, loading and hauling. Preventing theft of timber value and volume is a chief concern of all landowners and purchasers. A prime responsibility of the tree farmer and contractor is to assure that harvest boundaries, tree designation, logs and truck loads are accounted for throughout the operation. It's a good practice to assure each truck load of logs is scaled by an independent party, and that the mill purchaser provides a printed summary of each log load.

Commonly, the landowner and contractor agree for the mill purchaser to split timber payment into two shares, each of which is paid directly by the mill to the landowner and contractor for their pre-arranged payment percentage. To avoid timber trespass of inadvertent cutting on an adjacent property, the tree farmer should be able to verify property lines, legal timber title and road easements.

Gates to control access. Where possible, install locking gates and close them to prevent unauthorized access to the forest work site. Deny access to would-be criminals, prevent injury of passers-by and keep valuable machinery out of sight. Always post warning signs, such as: No Trespassing; Road Closed for Safety; Danger—Authorized Entry Only; Logging Ahead—Area Closed; Security Watch on Duty; or Monitored by Security Cameras, to deter unauthorized people from entering work sites and inform them of their legal exclusion from entry.

Secure contractor's job site. When the tree farmer can assist the contractor with security measures tailored to the situation, the remote forest operation can be better-protected during non-work hours. A contractor may employ a strategy to lock down, remove and/or monitor equipment at the job site. Park and lock equipment in a safe location overnight, and each morning inspect equipment for maintenance and safe function. Consider use of surveillance patrols, trail cameras, fencing, blocked access, locks and warning signs.

Contractor aware of security. A contractor typically assembles local



PHOTO COURTESY: REK STORM, AGL

Use warning signs for safety and to deter unauthorized access.

contact information, communication method and security response instructions for each job site. Many contractors have incident “emergency response kits” designed to guide proper crew response to vehicle crash, accident, fire, fuel spills, injury evacuation or vandalism. A response kit should be current and available on-site. Timely contact of the right people will speed response time to get assistance headed to the job site.

Watch and monitor operations. A contractor may employ a watchman for night and weekend duty if security problems are anticipated. Employ security surveillance using trail cameras and conduct periodic patrols as needed. When warranted, hire a security service and seek security help from the contractor. The contractor's fire watchman could be given a security role. Request county sheriff patrol of problematic locations. Greet uninvited visitors seen near the job site and record license plate numbers and

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descriptions. Photos taken with a smart-phone are helpful, as are written notes of any suspicious activity, accident or emergency. This could be useful evidence for later law enforcement or insurance investigation.

Coordinate with allies. The tree farmer may help build a team that contributes to project productivity, certainty and security. The tree farmer and contractor should coordinate to prepare tailored security plans. Coordination could also include the county sheriff, state fish and game officers, state foresters, highway department engineers, neighbors, the log-scaling bureau, hazmat contractors or insurance agents. Upon discovering a security incident or accident, communicate with appropriate individuals who can implement a timely response. Where criminal activity is observed, avoid disturbing the crime scene until the sheriff and state forester can investigate.

Watch-out for forest security problems

When developing appropriate security tactics, a tree farmer should consider their exposure to the following possible security breaches at the forest job site.

Property Crimes and Illegal Entry

- Vandalism of any business asset
- Theft of fuel, equipment, tools, supplies or vehicles
- Metal theft from equipment
- Dumping of garbage
- Road or gate damage
- Negligent fire starts
- Trespass
- Interference from unfriendly neighbors
- Poaching of fish or wildlife
- Damage and trash from shooting or unauthorized camping



Landowners can minimize losses by providing and maintaining a secure operation area.

PHOTO COURTESY: REX STORM, AOL

- Arson risk to timber and/or equipment
- Illegal substance dumps and grows
- Eco-sabotage damage or terrorism
- Protest or harassment that obstructs safe work

Timber Theft

- Theft of logs or loads
- Tree marking or unit boundary forgery
- Errant cutting across property boundary
- Doctoring timber scale or payment records
- False claims of legal timber ownership
- Theft of special forest products

- Stockpiled gravel theft
- Illegal road use or access

Business and Asset Casualty

- Insufficient or vague written agreements
- Uninsured liability exposure
- Accidental operator-caused wildfire
- Equipment or vehicle loss or accident
- Accidental petroleum or chemical spill
- Regulation liability loss
- Permit or licensing gaps
- Accounts payable or receivable errors

Small landowners should plan to incorporate appropriate precautions to minimize exposure to security losses for the owner and contractor on tree farm operations. ■

REX STORM is a Certified Forester and forest policy manager with Associated Oregon Loggers, Inc., the statewide trade group representing over 1,000 Oregon forest contract businesses. For more information, contact Associated Oregon Loggers, Inc., PO Box 12339, Salem, OR 97309; oregonloggers.org. Rex can be reached at: 503-364-1330 or rstorm@oregonloggers.org.



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Protecting Your Forest

By **NEIL SCHROEDER**

The ground was strewn with empty shells, some brass but mostly of aluminum and other metals. Also in the mix was garbage consisting of the remains of lunches, a few fuel cans and used tires. A large dumpster would not have contained the mess. The surrounding terrain was blackened with the remains of a



recent fire. This is what our group of Northwest Oregon Forest Protection Association (NWOFPFA) members saw just a few steps off Highway 26. "Shooters" using cheap ammunition had set up targets on stumps and the heat of the multiple shells was enough to start the fire. Suppression costs were over \$300,000. I use the term shooter because it appears those who are interested in sighting-in hunting rifles usually fire only a few rounds, while shooters seem to just want to fire as many rounds as possible. They



PHOTO COURTESY: NEIL SCHROEDER

A common sight on public and private forestland are shells left by shooters.

also seem have no interest in cleaning up their mess. Shooters have caused many forest fires in Oregon in the last few years, such as the Pit fire near Estacada.

Examples of trespass are rampant throughout our state:

- Last August in Columbia County, four men had an illegal campfire on private land. The fire spread to slash piles and burned through the unit before fire crews controlled the blaze. The men were apprehended and arrested.

- The Linn County Forest Patrol officer was alerted to a suspicious auto on private forest roads. He came upon the vehicle and the driver tried to speed away, but in his haste, he put the car in the ditch. The driver got out of the car and ran into the woods. Upon close inspection, the plates on front and back did not match. The vehicle identification number matched a recently stolen vehicle and the plates belonged to two other cars whose owners lived in nearby towns. A canine team apprehended the driver and he was appropriately charged and incarcerated.

- A property owner arrived at his tree farm to find the gate open and deep ruts leading from his small barn to the county road. His recently restored Yanmar diesel tractor was missing. The thief apparently had not been able to start the machine or lift the rear attachment, which resulted in ruts as the equipment was forcibly dragged out of the barn and into a waiting trailer.

Garbage dumping, four-wheelers

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tearing up roads, vandalized gates, poaching, trespassing, marijuana production, vandalism to equipment and gates, firewood and even timber thefts happen on Oregon private woodlands. As owners and managers, how can we address the problems and protect ourselves and our neighbors? Are there preventive strategies? Can we protect our investment without breaking the bank?

One strategy is: if you can't lick them, collaborate with them. In Northwest Oregon, ODF has recently renovated four shooting areas. Instead of targets placed on valuable trees or old stumps, the department developed dirt backdrops to use as target areas and to catch the lead from expended shells. Collaboration with local shooting organizations helped in the design, and has resulted in volunteers monitoring and teaching at these new sites.

There are no easy answers to any of these problems. However, most important is to know your neighbors and, if possible, be involved with them so they will return the favor. Do your diligence and find out who owns every parcel surrounding your land. Introduce yourselves and find out who they trust and who works with them. Know those people also. Neighbors will call you and let you know if something strange is happening on your property, if you are willing to talk with them and express your goals and concerns. Friends who like to hunt and hike in the woods can be very helpful. We have friends who regularly walk our property and always report if trees are down, gates are open or trespassers



PHOTO COURTESY: MIKE CAFFERATA

Volunteer shooters on Tillamook State Forest in Northwest Oregon help monitor this constructed site and educate others about regulations and wildfire prevention.

have been there.

Our Schroeder and O'Neil tree farms are in four different counties. We have homes on the two smallest properties and must drive at least a half-hour to any of the others. By actively engaging the neighbors, we have shared costs for new gates, received calls about trespassers and been told of operators on neighboring

lands. Generally, we keep informed even though we cannot be on the land every week.

Know your fire protection people also. You can do this effectively by joining one of the forest protection associations. Schroeder and O'Neil belongs to the West Oregon Forest

—Continued on next page—



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Protection Association because we have a tree farm in Lincoln County. We also belong to NWOFFPA due to ownership in Yamhill, Columbia and Washington counties. The cost is minimal and the time to attend the meetings might be 12 hours per year. If more small woodland owners belonged to these associations, the forest patrols could be increased. Presently we have some single officers patrolling many square miles of forests. They are an amazing group of people doing an almost impossible job.

The Oregon Woodland Cooperative has now sponsored two trips to Scandinavia. The sites we visited were unusually clean and obviously cared for by people who appreciate and love the forest. We learned of a Swedish constitutional right named *Allemansrätten*, which literally means “everyman’s right” and is a freedom available to all. Wikipedia



PHOTO COURTESY: NEIL SCHROEDER

The concepts of caring for the land, love of the forest and leave no trace are basic to citizens of the Scandinavian countries.

says this is a right to roam but with an equal emphasis on the responsibility to look after the countryside and

the maxim is, “Do not disturb, do not destroy.” Other Nordic countries have similar and sometimes more defined rules. In Norway, the term is *Friluftsløven*. The concepts of caring for the land, love of the forest and leave no trace are basic to these countries.

Here in Oregon and the rest of the U.S., it seems like the public feels they are free to roam, but the ideas of leave no trace and do not disturb are absent from the normal thinking. Our



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National Parks now emphasize leave no trace and “take out everything you take in.” Many tours, like rafting trips and camping trips, also have a similar emphasis, but at this point we have not convinced the public of our values. If we wish to have working, productive forests for future generations we will need to promote more of the Allemansratten and Friluftsløven attitudes. Perhaps we should work to make this a constitutional law in our state.

Be proactive in several ways. Visitors to your tree farm may have special interests. Native plant societies, weavers, hunters, mushroom gatherers and others can be helpful in protecting your investment. If you work closely with these groups they will appreciate your interest and share information with you about your property and what they see happening on it.

Twice we have discovered garbage dumps on our property. Officers tell me this is one of the easiest problems to individually correct. Almost always there is an obvious clue to who is the dumper. We found names and addresses, and even phone numbers, in the dump site, called or wrote the persons, and within two days the mess was cleaned up. By communicating with our neighbors, we learned who is often near or on our property. Not only did we gain information, but we found one of the most careful and efficient loggers available. Know your neighbors, your operators and your state forestry professionals.

Join the organizations which are devoted to helping you manage your tree farms. There is much to be done to improve the protection of our personal forest properties and the forests owned by industry and the government. A great deal can be done by working with these entities. Even more can be done by individuals who are communicating with their neighbors, their associations, their government agencies and within their families. Being active in forest-related organizations will help all of us pro-

tect our lands and our interests. ■

NEIL SCHROEDER is the current president of the Oregon Woodland Cooperative. He is also co-manager and part owner of Oregon Forest Canopy LLC and manages Schroeder & O'Neil properties. Neil is active in

Oregon Small Woodlands Association, has taught several classes in forest products marketing, and is a OSU Master Woodland Manager. He is retired from educational publishing sales and secondary teaching. Neil can be reached at 503-701-2417 or neilschroeder11@gmail.com.



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TreeSmarts: Forest Research You Can Use

▲ TreeSmarts: Forest Research You Can Use appears in every other issue of Northwest Woodlands. Column editor Ed Styskel reviews research being conducted from a host of sources, sorts through the items of interest to family forest owners, and provides a short summary of the pertinent results in understandable language. If you have a suggestion to share with Ed, please contact him directly at edstyskel@gmail.com.

▲ **Control of Laminated and Armillaria Root Diseases by Stump Removal and Tree Species Mixtures: Amount and Cause of Mortality and Impact on Yield After 40 Years.** 2014. Authored by D.J. Morrison, M.G. Cruickshank, and A. Lalumier. Forest Ecology and Management, Vol. 319, pgs. 75-98.

Pathogenic root-inhabiting fungi cause economically important root diseases in woody plants. These fungi infect and frequently kill their hosts during the parasitic phase of their life cycle, then use host tissues for food during their saprophytic phase. Phases can last a few years or decades, during which the fungi spread from infected trees to non-infected ones by root-to-root contact.

In 1968, a trial was established in the southern interior of British Columbia to determine if whole tree logging, stump removal and root raking would reduce mortality in the next rotation on a site infected by *Phellinus sulphurascens*, the cause of laminated root disease. The study site was mature forest (89 years old) with an overstory of Douglas-fir (75

percent) and lodgepole pine (25 percent), plus a sparse understory of western redcedar and Pacific yew. Paper birch and quaking aspen in forest openings are known to regenerate naturally, are immune to *P. sulphurascens* and have low susceptibility to *Armillaria ostoyae*.

Stumps were pushed over by a bulldozer and yarded, with roots attached, to a landing. Root raking after tree removal was accomplished using a bulldozer fitted with a toothed, land-clearing blade to rip soil down to approximately 18 inches.

In stumped and not stumped blocks, seedlings of Douglas-fir, lodgepole pine, western redcedar, and paper birch were planted alone and in all combinations of two species in three plots per block; western larch and Engelmann spruce were planted on one plot in each block. Tree mortality was recorded periodically by cause over 40 years. Dominant height, diameter and basal area were measured every five years after 20 years.

The highest survival after 40 years occurred in plots where stumps were removed, especially for those plantings of Douglas-fir alone, or in mix-



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ture, or of spruce or larch. Mortality over all species at age 40 was on average 14 percent lower in plots stumped than in those not stumped. Principal causes of mortality in both blocks to year 40 were planting failure, root diseases (mainly *A. ostoyae*), abiotic factors, thinning and (for lodgepole pine) mountain pine beetle.

Stump removal and root raking improved planting survival and reduced root disease mortality caused by *P. sulphurascens* and *A. ostoyae*. For all species except pine, spruce and redcedar (and except for Douglas-fir with redcedar), yield in stumped plots showed positive effects on basal area by age 40 compared to plots not stumped, especially for western larch or Douglas-fir. By age 40, height growth was also greater (by an average of 28 inches) in stumped plots for most species.

The quadratic mean diameter of all trees, and of the 10 largest trees, per plot were most affected by the species planted; plots of larch and Douglas-fir had the largest trees. Admixing of planted species usually lowered overall combined basal area and had varying effects on tree height and diameter compared to monocultures. Admixing of resistant and susceptible planted species provided little benefit on reducing disease impact in the susceptible species. Disease effects might be lowered longer-term by disease-tolerant species, like redcedar, that can tolerate shade. Those trees could then take advantage of canopy gaps created by other diseases and insects. Admixing is affected by functional traits that alter the combining-ability of the planted species and their interaction with pests.

Duff Mounds. 2015. Authored by S. Hood, S. Smith, and D. Cluck. Fire, Fuel, and Smoke Science Program, Rocky Mountain Research Station. 2 pgs.

Even with low-intensity fire, prescribed burning to reduce fuel in areas with large diameter and old growth trees may bring significant

mortality from the smoldering of large duff accumulations at their base. Burning when duff moistures are low can lead to root cooking, basal girdling and tree mortality. Prescribed burns on the Lassen National Forest and Lassen Volcanic National Park were studied for up to three years post-fire to determine the effect of raking duff away from trees. One worker could clear duff down to

mineral soil two feet out from a tree bole in 16 minutes average. Raking reduced cambium injury and red turtentine beetle attacks, with no collateral reduction in tree growth rate. Trees with pre-existing fire scars were found to be especially vulnerable to ignition and death if raking is not used. ■

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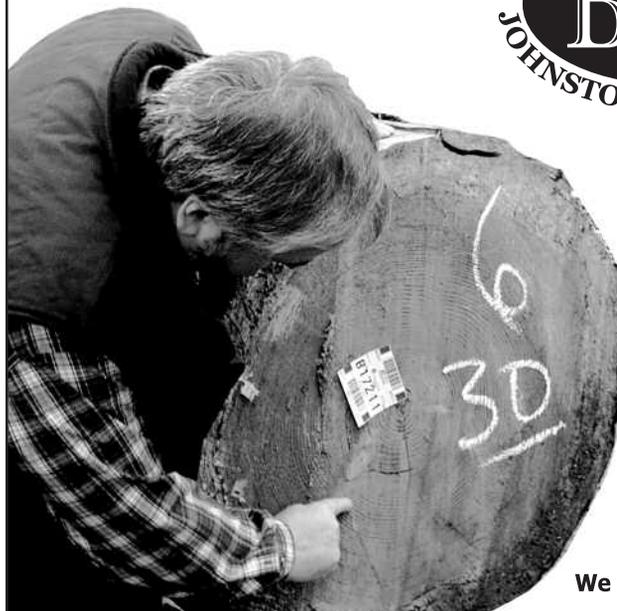
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Tips From The Treeman



Steve Bowers

▲ **DEAR TREEMAN,** Last summer the Oregon Department of Forestry (ODF) used my pond to put out a fire that started near my property. They basically pumped it dry. I lost some of my fish and had to wait until this winter for it to fill up again. I know I am late, but is there any recourse for them using my water? —*Jim*

▲ **DEAR JIM,** Well, it pretty much depends on the munificence of those who used the water—water of the state... just like the furry critters that drink it. First, you applied for a Permit to Store Water in a Reservoir with the Oregon Water Resources Department. After completing the project, you then submitted the Claim of Beneficial Use, which was filed in the county where the pond is located, thus bequeathing you a water right: a right to *store* water, not necessarily *use* it.

▲ Still with me? In the case of fire (an emergency) entities requiring a water source can enter your property without prior notice. If time allows, you would likely be notified, but a fire is like flatulence—it waits for no one. And if a lock required breaking or a fence cutting, so be it. In conversations with ODF, when circumstances require inordinate means to gain access, there will be an honest effort to remunerate you for any loss or destruction of property.

▲ But in the case of emptying your pond, that's water under the bridge. This is not to say you have no recourse, but your options are few and the desired outcome uncertain. You could start by requesting a refill from the culprits who raided your reservoir. But again, conversations with various entities reveal no instances that will raise your hopes, much less the water level in your pond.

▲ Next stop... lawyers. Yes, it is with near certainty they will be the only

winners. So, count your blessings you are one of the fortunate ones who owns woodland property, and even more fortunate you have a pond on that property. And most fortunate if you're not the aggrieved one when they find out you did not apply for a permit and do not own a water right. Unlike when the pond was being constructed, you gotta know when to quit digging. —*Treeman*

▲ **DEAR TREEMAN,** Why are Lincoln Logs called Lincoln Logs? —*Brig*

▲ **DEAR BRIG,** The visceral response would be a correlation between our Rail Splitter President, Honest Abe, and the material utilized in making those rails—logs or Lincoln Logs. Or could it be we instinctively associate Lincoln with being born in a log cabin? Both credible courses of deductive reasoning.

▲ But keep in mind the other 10 U.S. Presidents allegedly born in log cabins. So why not U.S. Grant Logs? Grant-grained alcohol perhaps. William Henry Harrison Logs? Let's not rock the boat here, folks, or rather Tippecanoe.

▲ In 1916-1917, arguably our greatest American architect, Frank Lloyd Wright, was designing the Imperial Hotel in Tokyo, Japan. His second son, John Lloyd Wright, was working with his father on the project. The foundation of the hotel was designed with interlocking log beams that would allow the hotel to sway, but not collapse in case of a tremor. The Imperial Hotel would be one of the few buildings that remained standing after the 1923 Great Kanto Earthquake that devastated Tokyo.

▲ John fell out-of-favor with his

father and returned to the U.S. In 1918, he designed a toy based on the architecture of the Imperial Hotel. Wright began to market his creation through his own firm, the Red Square Toy Company, and two years later he received a patent for his "toy-cabin construction."

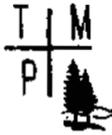
▲ Some attribute the design of interlocking log beams (linkin' logs) and Wright's creation of the alliterative name, Lincoln Logs, as a sign of patriotism and veneration to our 16th President. Perhaps. The original Lincoln Log set came with instructions on how to build Uncle Tom's Cabin, as well as Abraham Lincoln's cabin. Not only architecture, but marketing extraordinaire.

▲ Others contend the product was named after Abraham Lincoln and his log cabin pupilage as an act of patriotism during World War I, near the time of the toy's development. Another consideration is that of utilizing his father's real middle name, Lincoln, thus a sign of respect for his progenitor. We don't think so.

▲ Growing up in Oak Park, Illinois, John Lloyd Wright spent considerable time in the "wonderland playroom" designed by his father. Abe the Illinois Congressman—Land of Lincoln. Was it a correlation between the elaborate wonderland playroom and an iconic President's humble beginnings? We could buy that.

▲ During World War II, restrictions on metals and other materials constrained production of various toys, but wooden Lincoln Logs continued to roll off factory lines: another testament to the desirability and renewability of wood. Lincoln Logs were originally carved from redwood, but today are manufactured from pine, a species native to the original Lincoln Log Home on the Knob Creek Farm in Kentucky.

▲ For nearly a century, Lincoln Logs have been a toy enjoyed by young and old—all young in spirit. As a welcome change to the current trade deficit, for decades having been manufactured in China, Lincoln Logs have come home to the United States. Burnham, Maine toymaker K'Nex is now the proud producer of the icon in American toys. —*Treeman*



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Trail Cameras: Serious Fun in the Woods

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model, trail cameras may be set for still photos, motion (and sound) video or both modes in sequence. Still photos can be taken in bursts of two or more shots per trigger.

Cellular versus wireless connectivity.

Cellular trail cameras use a wireless telecommunication provider such as Verizon or AT&T to send pictures to your email, smartphone or cloud. Each trail camera needs its own data plan and fee. Two disadvantages are the need for at least three bars of cell phone reception and the cost of a monthly subscription data plan. Cellular trail cameras allow the owner



PHOTO COURTESY: ED STYSKEL

This ingenious and adjustable DIY trail camera mount costs about \$2 for materials and is described on the Internet at: cambushcamo.com/blogs/news/19586237-do-it-yourself-trail-camera-mount.

to see immediately what triggered the camera. Even if a camera is stolen or damaged, its images have already been sent and are available for offender prosecution. Cellular may also eliminate the need for return maintenance visits, since many enabled trail cameras can remotely change camera settings, plus show camera failure and battery level.

Wireless trail cameras use Wi-Fi connectivity that eliminates the need to purchase a cell phone data plan for each camera. Users with multiple cameras may link multiple cameras together for even greater cost savings. A disadvantage is the extra power needed to stay connected to a Wi-Fi network, meaning that battery life is shorter unless external batteries or solar collectors are added.

Battery life. Battery consumption depends on the number of trigger events in daylight, at night with flash, video versus still photos and ambient temperature. For low temperatures and peak longevity, lithium batteries are better than alkaline or NiMH.

SD card. A secure digital (SD) card is usually required, and a high capacity will allow fewer return visits for retrieval or exchange.

GPS geotag. This feature embeds the camera's longitude and latitude into each photo file so the photo's

geographic location may be shown on Google Earth or another geotag-enabled software. This feature may help legitimize photos used to prosecute trespassers.

Date and time stamp. Some trail cameras include date and time, ambient temperature, and/or moon phase in the captured frame.

Firmware. A trail camera is basically a small computer with processing instructions called "firmware." Check the manufacturer's website every six months for firmware updates.

Finally, the Internet is a great source for trail camera reviews, camouflaging techniques, homemade mounting devices, techniques for testing camera features and recommended wildlife attraction lures. If you use a trail camera in ways not described above, please contact this author to expand the discussion. ■

ED STYSKEL is a Certified Wildlife Biologist® and member of the Washington Farm Forestry Association and the National Woodland Owners Association. Now retired from the U.S. Forest Service and private consulting, he and wife Elly own 26 acres of forest and wetland in Pend Oreille County. He can be reached at edstyskel@gmail.com.

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