

MARCH EDITION

SURVIVAL LIFE

MAGAZINE

25

**ESSENTIAL
NATIVE AMERICAN
SKILLS THAT
KEPT THEM
ALIVE**

EMERGENCY COMMUNICATION

LIGHT, FIRE, SMOKE & FLAGS

PREPPING FOR FINANCIAL COLLAPSE **X**

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What Will You Plant
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**WHAT TO DO
WHEN YOU
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FROM THE EDITOR

DEAR SURVIVALIST,

Spring is an exciting time to be a survivalist or outdoorsman.

With winter (mostly) behind us and warm weather approaching, more of us will start getting outside and doing the things we enjoy – hiking, camping, gardening and all those things that make us love the outdoors.

Spring is also the perfect time for new beginnings. If there's something you want to change or improve about your lifestyle, this is the perfect time to do it.

Maybe you want to expand your survival garden and become more self-sufficient. Maybe you want to become more prepared for a financial crisis. Maybe you want to improve your hunting and fishing skills, learn how to communicate in an emergency or hone your outdoor survival skills before you set out on that next big hike.

Whatever you want to work on, now is the time to do it.

IN THIS MONTH'S EDITION OF SURVIVAL LIFE MAGAZINE:

We've included some great original articles from our expert contributors.

You'll learn about survival gardening, emergency communications, preparing for a financial collapse, surviving an encounter with a wild animal and even how to remove a splinter quickly and painlessly.

We hope that the information you find in this issue will make you a better prepper and serve you well in your survival journal, this year and beyond.

REMEMBER, WE'RE ALL IN THIS TOGETHER!

"Above Average" Joe

Editor-in-Chief

Survival Life Magazine





25 ESSENTIAL SURVIVAL SKILLS THAT KEPT THE NATIVE AMERICANS ALIVE

• • • • • By: Alex Park

It is very easy to forget in our modern times of the internet and instant heat, cooling, food and shelter that people use to live a much simpler and much harder life before the advents of the modern comforts we take for granted every day. The Native Americans are the prime example of how people use to live off the land and survived the threats of nature with basic and cultivated survival tactics.

Native Americans crafted their own survival tools, built their own fires, foraged for their food and hunted their prey all by hand and it is astounding to think how well they were able to survive and thrive based on necessity alone. Would someone like you or me be able to do the same if we were put into such a hostile environment? Probably not but that it is why it is good to be aware of how the Native Americans were so deftly able to sustain themselves in an unforgiving North American wilderness.

The following list will highlight just 25 of some of the more interesting survival tactics commonly used by the tribes of the Native Americans of North America. Let this list be an insight into the lives of these fascinating people, an educational tool for our modern culture, a means of appreciating a society that is so rare and thin today and a reminder that the human spirit and

will are much stronger than what we give them credit for.



25. COMMUNITY

The tribal mindset and lifestyle of the Native Americans of yesteryear plays a huge role into their survival tactics. As you probably are already aware, Native Americans distinguished themselves by tribes. You have probably already heard of the more common and prominent

tribes like the Apache, Navajo and Mohican. The sense of community, sharing of resources and wisdom and collective protection between tribesmen cannot be understated when considering how Native Americans were able to survive.



24. FOOTWEAR

If you have ever worked a day in your life with an improper pair of shoes then you know how

important footwear is to comfort and bodily health. Footwear was integral to Native American survival and moccasins made of tanned leather and sewn together were common in North American tribes. Although designs and cuts differed from tribe to tribe features like rabbit pelt for added warmth and hardened rawhide for increased durability were common attributes of moccasins.

23. THE FOX WALK

The fox walk was a method of tracking, traversing and hunting stealthily for Native Americans. This specific style consisting of wearing thin moccasins to feel the ground better, landing on the heel first and rolling your foot down, and traveling in lines to conceal your numbers was used in battle and in hunting.



22. PRESERVING MEAT

Meat got many Native American tribes through harsh winters but there were no preservatives or refrigerators back then. Instead, Native Americans would preserve

meat by cutting it into lean strips, eliminating fat and drying it in the sun. This is essentially what we know today as beef jerky. This thin, dried meat can keep for a very long time and was an essential food supply for Native Americans.

21. ANIMAL HIDES

Animal hides were essential to Native American life and key to their survival. By honing a process of tanning and smoking, Native Americans were able to turn raw animal hides into moccasins, clothing and even shelter.

20. NATURAL OBSERVATION

Being able to tell what kind of weather was on the horizon was a huge asset for Native Americans and they used the natural signs of the environment to predict weather and to prepare accordingly. They would study the behaviors of animals who have much keener senses for weather than we do and read the clouds.

19. USING PLANTS

How Native Americans were able to discern the healing powers of certain plants is an unknown but we do know that these practices were handed down from generation to generation so it was probably a case of trial and error. They would use plants, herbs and other life found in nature to heal wounds and treat illnesses.



18. ARTFUL CRAFTING

By turning the crafting of basic survival tools and shelters into works of art, Native Americans were able to make the essentials of life that would stand up to the rigors of their environment. Native Americans took their time to craft tools and shelters thus ensuring their durability and overall quality and helping them survive in harsh conditions.

17. BODY PAINT

Before hunts, Native American tribes would paint their bodies so that they could blend into the natural scenery as stealth was a very important aspect of survival in those times.



16. CLOTHING

Proper clothing is essential for anyone to survive in any situation and the Native Americans had their clothing crafting skills down to a science. They used animal hides and smoked leathers to create warm clothing for the cold winters. They also used certain colored clothing for stealth when hunting prey.

15. CAMPS

The Native Americans often built temporary camps for hunting excursions but they still needed to maintain a certain level of stealth. They would build these camps of earth-toned materials and animal skins and tuck them into the base of foothills or other strategic natural sites so that they would be hard to spot from a distance.



14. BLOW GUNS

These have become something of a novelty in today's day and age but blow guns were actually used for hunting and in warfare by Native American tribes such as the Cherokee. They would fashion these weapons out of cane or

reed. The reed would be hollowed out to a tube wherein a dart would be inserted and propelled by a strong breath towards a target. Blow guns were used primarily to kill small game like birds, rabbits and squirrels and were sometimes tipped with poison extracted from venomous snakes and even Gila Monsters.



13. DEADFALLS

Deadfalls are a kind of trap that were used by Native Americans to kill their prey. A heavy rock or log would be elevated by rope or a lever made of wood over a piece of meat or food to entice an animal. The deadfalls usually had a trigger that when the animal touched it, would activate the primitive trap and send the heavy object crashing down on them.



12. SNARES

Trapping was one of the main ways that Native Americans caught their food and snares were among the most common types of traps utilized. A snare uses a vine that is tied in a loop and attached to a young sapling that is bent over and is fastened by tying it to a stick driven into the ground. The loop goes around a piece of meat to entice an animal and when the animal puts its head through the loop and tries to make off with the bait, the stick is dislodged and the loop turns into a noose around the prey's neck and is suspended in the air as the sapling, free of its fastener, springs back into an upright position.

11. TRAPPING PITS

This is one of the more straightforward survival tactics utilized by the Native Americans. As the name suggests, this trap is simply a dug pit sometimes fitted with spikes at the bottom to kill or bleed the trapped animal. The dug pit would be covered up by branches and earth so that unsuspecting animals would walk over it and fall in.



10. FISHING WEIRS

Fish were an indispensable source of food for Native Americans and among the ways that they would catch fish were fishing weirs.

Fishing weirs are essentially traps built by rock or wood that would lead fish migrating up or downstream to a corridor built to be narrow and ultimately trap the fish.



9. SPEARFISHING

Another way the Native Americans caught fish was by spearfishing. There were different methods of spearfishing employed depending on the time of year. In the winter when the lakes would freeze over, a hole was cut into the ice and a lure made of bone was used to entice the fish toward the hole. Then, a spear made of wood for the shaft and copper or bone for the tip punctured the fish.

8. HUNTING TACTICS

It may seem simple now that we look back but many hunting tactics devised by Native Americans were learned over the generations and used to help them survive. Simple

tactics like reading the wind and standing downwind from a target increased the chances for success of a hunt dramatically.

7. NOMADIC PRACTICES

Not all Native American tribes stayed in one place. After the Spanish visitors brought horses to the great plains, many tribes such as the Blackfeet, Crow and Comanche adopted a nomadic lifestyle in order to hunt buffalo across the plains all year round. This supplied for them a stable food source and ensured, to a certain degree, survival.



6. TEEPEES

Of course, there can be no survival without some form of shelter. The Great Plains Native Americans knew this very well and built teepees which are essentially tents. They were commonly made from buffalo hides and long wooden poles.

5. DEDICATED TRIBE ROLES

Almost every aspect of Native American life was spurred by

survival. This is even true of the gender roles of the Native Americans. The men were the hunters and to prevent any waste which could mean the difference between life and death in the North American frontier, the women were the cooks. They would prepare the meat that the men brought back immediately so as not to waste a single morsel and ensure that they had plenty of food.



4. BOWS

An indelible image that most people have of Native Americans is the bow and arrow which was vital for the survival of all tribes in North and South America. Most bows were fashioned out of wood and strengthened with animal tendons. Bow strings were made from animal tendon or yucca and similar natural fibers.

3. AXES

There are certain tools that are as essential now as they were in the days of the Native Americans for survival. Among them are axes. While Native Americans used axes for warfare, they were also used to chop wood that would be used for many different causes and to hunt prey.

2. WATER

This may seem a simple and almost thoughtless aspect of survival but the fact of the matter is that if the Native Americans did not have sources of fresh water to draw from, they would have never survived. The plentiful rivers and lakes of the Americas helped sustain the Natives and they regarded water sources with great reverence.

1. FIRE

There is no life without food and warmth and fire is number one on the list of 25 essential survival skills that kept Native Americans alive because it provided both. There were many methods of building fires among Native Americans but among the most common were striking stones like pyrites together to create a spark that would be caught by a pile of tinder. The friction caused by rubbing 2 sticks together also generated enough heat to combust tinder. Bow drills and fire pump drills were also common methods of starting fires. These contraptions used string wrapped around a stick and controlled by a bow to generate the heat needed to start a flame.

Though the methods and practices of Native Americans varied from tribe to tribe, the innovation for the sake of survival was universal. They borrowed methods from each other and created ones unique to their tribe. They even borrowed from foreign settlers and visitors. The Native Americans were a group of humans that had to learn how to adapt and we are all the richer and wiser for their survival efforts.

It is hard to separate the survival tactics we employ today from those introduced to us by the Native Americans. Thus, we owe a debt of gratitude to these people who learned how to tame the wild Americas and make them a place hospitable for human life.



9 WAYS TO REMOVE A SPLINTER

>HOW TO REMOVE A SPLINTER NATURALLY AND PAINLESSLY

By: Lars K Williams

Splinters can be hard and painful to remove. The most common first thought is “Where are the tweezers?”



With tweezers, it can be a long process and can sometimes make the splinter go deeper into your skin. Here are 9 alternative ways to remove those pesky and often painful splinters.



BACON FAT

Cut a pea-sized piece of white fat from a raw strip of bacon and place directly onto the splinter. Secure the bacon fat with a band-aid and leave on overnight. The bacon fat should draw out the splinter from your skin.



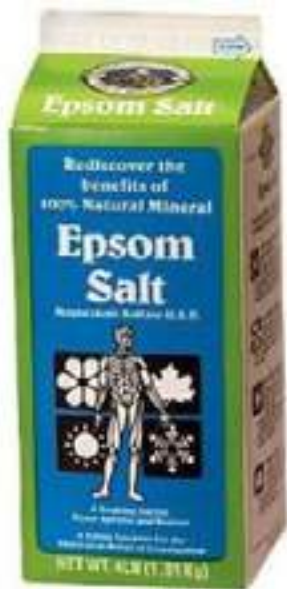
HYDROGEN PEROXIDE

Submerge the affected area in hydrogen peroxide. Splinter should get drawn out within minutes.



ONION

Tape a fresh onion slice onto the splinter and leave on overnight. The splinter will be drawn close to the surface of your skin and will be easy to remove.



EPSOM SALT

Soak the affected area in an epsom salt bath until the splinter gets drawn out.



WIDE MOUTH BOTTLE & HOT WATER

Fill bottle almost full with hot water. Place hand with splinter over the opening of the bottle so the opening of the bottle is

completely covered. Steam and suction caused by your hand should draw out the splinter from your skin.



CLEAR NAIL POLISH

Apply clear nail polish over the affected area and let dry. Peel off in the opposite direction of the splinter. The splinter should come right out.



ESSENTIAL OILS

Add a few drops of lavender or clove essential oil to the affected area. This allows the splintered skin to naturally swell. The splinter should come right out.



CASTOR OIL

Rub castor oil into the affected area. Cover with band-aid and leave on overnight. This softens the skin and the splinter should be easier to remove



TOMATO

Apply a small piece of tomato directly onto the splinter with a band-aid and leave on overnight. This should draw the splinter right out.



5 HERBS FOR YOUR SURVIVAL GARDEN

By: James Stevens

Herbs aren't just for cooking. Many herbs possess medicinal properties that aid with so many ailments! Here are my top 5 herbs you should add to your survival garden this year.

1. BASIL



A popular additive in cuisines from around the world, basil is also known for its defenses against low blood sugar and antioxidant properties almost as much as it does for the rich flavor.

Basil offers several other medicinal uses, including as a deodorizer, anti-arthritic, topical antioxidant, anti-inflammatory, and insect repellent. When eaten, Basil provides us healthy doses of vitamins A, K, and C, as well as magnesium, iron, potassium, and calcium.

Grow your own basil from seed by sowing indoors in the early spring, then transplanting outdoors at least two weeks after danger of frost has passed.

- **Germination:** 5 – 10 days
- **Hardiness:** Annual (very frost sensitive)
- **Light preference:** Full sun / Morning sun, afternoon shade (hotter climates)
- **Soil conditions:** Rich, moist, well-drained, pH 6 – 7
- **Fertilizer:** Incorporate compost or blood meal at time of transplant. high-nitrogen (2:1:1 ratio) every two weeks thereafter.
- **Height:** 24 – 30"
- **Spacing:** 12 – 18"
- **Time to Harvest:** 10 weeks

2. CILANTRO



Cilantro is high in vitamin C, as well as several vitamins and minerals. It is also a revitalizing herb that aids with digestion and relieves inflammation that may cause gastric upset.

Grow your cilantro by sowing seeds directly outdoors during spring and summer. Once flower buds develop, leaves will become scarce. Harvest cilantro leaves as soon as they mature.

Remember to keep your cilantro plant tidy. Clean up any fallen leaves or other debris from around the plant to prevent fungal infections. Also, keep an eye out for parasites like aphids which enjoy munching on tender young cilantro stems.

- **Germination:** 7 – 10 days
- **Hardiness:** Annual
- **Light preference:** Full sun / Light shade
- **Soil conditions:** Well-drained, pH 6.2 – 6.8
- **Fertilizer:** Supplement with a balanced fertilizer every 4 – 5 weeks.
- **Height:** 12 – 18"
- **Spacing:** 4 – 12"
- **Time to Harvest:** 3-4 weeks

3. LEMON BALM



A member of the mint family of herbs, lemon balm is easy to grow and offers several health benefits in addition to its wonderful citrus aroma. Lemon balm naturally eases nerve and muscle tension. The fresh herb can be used to reduce inflammation and prevent infection. Because of its antiviral properties, lemon balm may be applied to reduce the healing time of cold sores. When ingested, lemon balm relieves gas, cramping, and

stomach upset. Lemon balm tea is often consumed to promote mental clarity and alertness.

Grow your own lemon balm from seed by sowing indoors, then transplanting outdoors in spring or fall. To harvest, lemon balm is one of only a few herbs which may be cut all the way back to rejuvenate the plant. During cold months, lemon balm must be mulched to protect its roots if the temperature is expected to drop below 0°F/-18°C.

- **Germination:** 7 – 14 days
- **Hardiness:** Zones 4 – 9
- **Light preference:** Full sun / Morning sun, afternoon shade (hotter climates)
- **Soil conditions:** Rich, moist, well-drained soil, pH 6 – 7
- **Fertilizer:** At time of planting: Incorporate a balance of nutrients (is: compost, blood meal) into soil / high-nitrogen fertilizer every 2 weeks thereafter.
- **Height:** 18 – 26"
- **Spacing:** 2 – 4"
- **Time to Harvest:** Throughout growing season

4. OREGANO



Oils distilled from oregano leaves can be used to treat respiratory maladies, digestive upset, parasitic infections including fungal infections, skin conditions like dandruff and psoriasis, muscle aches and joint pain. Oregano is also a natural insect repellent.

Grow your own oregano from seed by sowing indoors, then transplanting outdoors in early spring. When harvesting, remember that both Oregano leaves and flowers are edible and possess similar flavors. During cold months, oregano should be mulched or covered with a cold frame to protect roots from freezing.

- **Germination:** 7 – 14 days
- **Hardiness:** Zones 4 – 9
- **Light preference:** Full sun / Morning sun, afternoon shade (hotter climates)
- **Soil conditions:** Well-drained, pH 6.5 – 7
- **Fertilizer:** Apply high-nitrogen fertilizer once in spring when new growth begins to appear.
- **Height:** ground cover / 8 – 24"
- **Spacing:** 12"
- **Time to Harvest:** 11 - 13 weeks



5. PARSLEY



As a natural antibacterial remedy, parsley can bolster your immune system and neutralize bad breath. Parsley is also a powerful

antioxidant and anti-inflammatory which makes it great for digestion and detoxification. Please note: Pregnant women should stay away from this herb as parsley is also known to induce uterine contractions and has been known to cause miscarriage.

Grow your own parsley from seed by sowing indoors, then transplanting outdoors in early spring. Mulch around plants to keep soil moist, but avoid letting mulch touch the stems to prevent rot. To promote thicker foliage, cut parsley down to stems in early fall. In the second year of growth, once flower stalk appear, parsley becomes bitter and

unpalatable. You may wish to allow blooming plants to go to seed and harvest for replanting the following year.

- **Germination:** 14 – 30 days
 - **Hardiness:** Biennial
 - **Light preference:** Sun / Part shade
 - **Soil conditions:** Rich, moist soil, pH 5.5 – 6.7
 - **Fertilizer:** Incorporate balanced fertilizer at planting time then high-nitrogen every few weeks thereafter.
 - **Height:** Varies
 - **Spacing:** 12 – 18"
 - **Time to Harvest:** 10 - 11 weeks
-



PREPPING FOR FINANCIAL COLLAPSE

..... By: James Smith

WHAT CAUSES A ECONOMIC CRISIS, AND HOW CAN YOU PREPARE?

Financial collapses or recessions are the times where the financial institutions in an economy are in distress. The words recession or financial collapse have no proper definition; however, they are defined by time periods where there is a sharp increase in unemployment, closure of major businesses due to bankruptcy, and decrease in consumer spending. This cycle in an economy also results in hyperinflation which leads to civil and social unrest.

The world has witnessed some great recession periods that affected some major economies. In 1982, China was affected. After the First World War, Germany was affected when its economy was overburdened by the war losses. In 1930, the Great Depression struck the USA, where not only the US stock exchange crashed but

its banking system also failed. In the 1980's, the Soviet Union was attacked by a financial crisis which it could not tackle, and this led to the breaking of the communist empire and the emergence of Russia. In the early 2000s, the USA was again affected due to the crash of the Dot Com Bubble. Countries like Japan, Greece, India and Chile have also witnessed some financial crises over their economic history.

WHAT CAUSES FINANCIAL COLLAPSE?

The numerous financial crises force one to think: what starts these financial collapses?

Economists believe that financial crises begin with asset bubbles. Assets such as gold, land, and equities experience a boom which leads to an increase in investors. To invest in these assets, the banks and financial institutions enter in as they lend out the credit that is invested. Hence, the rising value of the asset involves the investor and the financial institutions. The



investors who are late, realize that at the peak of the boom, they have bought too much. After the peak the value starts to decrease. The opportunity was little but the money invested was huge, this ends up deflating the economy and causing a financial crisis.

Today, the world is again seeing some major economic fluctuations. In the middle of 2015, the Chinese stock market crashed that affected the value of the A-shares by one-third. Furthermore, oil as a commodity is also scaring economists who believe that it might stir up a new crisis. If the price of oil increases, the Middle Eastern region would be affected drawing in many economies in the downfall.

HOW WILL FINANCIAL COLLAPSE AFFECT US?

Millions of people believe that the world is on the verge of a major economic downfall; however, very few people are prepared for its repercussions. It is a sad fact that if such events take place, many people would not last more than a month with what they have stored in their houses. Everyone is so used to the idea of doing everything on the spot that they have not piled up basic stock at home or prepared themselves for a bad situation. The economy is already in distress. To crumple it down it wouldn't require much; a war, major terrorist attack or a devastating natural disaster would do the trick and crash the economy.

The scary part is, the society of today is very vulnerable and the

majority of the population is not prepared for unseen, unfortunate events that can occur any time. They just do not have a plan. But there are many ways people can prepare themselves for a financial crisis.

During a financial crisis, many people lose their jobs, and finding a new one is a challenge. It is better to get rid of the debt owed. A budget should be planned so that surplus income can be utilized to pay off the debt. Laddering technique should be used, which is paying off the highest interest rate loan first followed by the ones with lesser interest rates. An emergency fund should be set and maintained so that when unemployment strikes, one has the finance to get through the tough times. Liquid cash on hand is very important to survive financial crisis, this should be set aside too. Having a home

based business is also a good way to prepare yourself for unseen situations. This would generate income and keep you afloat when jobs start firing.

HOW TO PREPARE

Food

During a financial crisis, food becomes a valuable commodity as it is essential for survival. Many families do not stock food but rather believe in getting it when needed. If food runs out a lot of hungry people would be on the lookout for something to eat. Growing your own food and having your own supply in the backyard or garden is a good way to store up food for the future.

Water

Without water, humans can die in





a few days. One should always have a plan in case water runs out. Storing water in containers is a good idea. Water purification tablets should also be handy so that in cases where clean water may run out, they may be of use. In case of emergency, shelter plans should also be well thought out and prepared beforehand. One should always have a place to bug out when things go wrong.

Clothing

Clothing is another essential for survival. Emergency clothes according to the weather should be stored so that they can be used when need arises. Comfortable shoes are also necessary. In critical situations, the footwear has to be

comfortable and long lasting so that long hours of walking do not seem worse than the situation itself. Personal hygiene items such as soap, toilet paper, toothbrushes should also be stored beforehand. One should also treasure important tools such as an axe, lighters, matches, sewing kit, first aid kit, self-defense kits, compass, Swiss knife, candles, extra gasoline, flashlights, batteries and lanterns. These tools may not be available in crisis times hence it is good to plan beforehand and have them on yourself.

Communication

In times of crisis communication is important. An emergency cell phone is a good idea to be stored

for you and your family. Apart from communication, one needs to stay informed too and that can happen through a radio. In the advanced life of today, one may not feel the need but during crisis radio may be one of the valuable items on you.

CONCLUSION

One must always have a backup plan, because in crisis the reality is different than what you have imagined. In case things go wrong, it is better to have flexible arrangements prepared to take care of yourself rather than depending on others.

EMERGENCY COMMUNICATIONS: >LIGHT, FIRE, SMOKE & FLAGS

By: Robert Brenner

This article will explain how light, fire, and smoke can be used to send messages and quickly relay information in an emergency.

Audible signals such as drum beats or loud horns convey information, but sometimes the sender didn't want to warn others of their presence, so silent long distance signaling was used. Light has been used to send and receive information for thousands of years.



COMMUNICATING WITH FIRELIGHT AND SMOKE

In ancient days, people communicated by firelight.

Signal fires were the “in thing.” Not only did they tell friendly forces

of a presence, or of success in battle, a large collection of fires also intimidated intended victims. Fire and smoke have been used to communicate trouble or distress among people ever since. The invention of the telescope in the 1700s significantly increased

the range of long distance silent communication—observers could see signals at far greater distances.

Native North American Indians used smoke to communicate.

A fire was started using damp grass that released smoke. As the grass

dried out, a fresh damp bundle was placed on the fire. Holding a blanket or animal skin over the smoking fire and then quickly moving it released a puff of smoke that was a quickly recognizable message and could be seen from far away. The location of the signal fire itself had meaning—halfway up a hill meant “all is well.” A signal fire from the top of the hill indicated danger.

In 150 BC, a Greek historian (Polybius) devised a system of codes converting Greek alphabetic characters into numbers based on a sender holding up two burning torches. His “Polybius square” was a form of early cryptography. It was implemented by the Japanese and Germans all the way into the early 1900s to communicate as far as the eye can see.

	1	2	3	4	5
1	Α	Β	Γ	Δ	Ε
2	Ζ	Η	Θ	Ι	Κ
3	Λ	Μ	Ν	Ξ	Ο
4	Π	Ρ	Σ	Τ	Υ
5	Φ	Χ	Ψ	Ω	

SCIENCEPHOTOLIBRARY

Ancient Chinese soldiers guarding the Great Wall warned other guard towers using smoke and fire. It’s said they could warn nearby guard stations of enemy presence quickly and send (transmit) a warning signal along the Wall over 400 miles in just a few hours.

During the selection of a new Pope in Rome, smoke was used to signal the status of deliberations



and secret ballot voting by eligible cardinals. Black smoke indicated continued discussions. White smoke told the people outside a new Pope had been elected.



Near Chile, native people used fire and smoke to signal the presence of food. If a dead whale drifted ashore, they would contact others by lighting a smoky signal fire to tell people to gather and collectively harvest the abundant whale meat before it spoiled.

Aboriginals in Western Australia used smoke signals to tell others of their presence. Other groups would “put up smoke” to signal their own presence and open an opportunity

to trade and share news.

On April 18, 1775, patriot Paul Revere made his historic ride based on a light signal. He was an express rider from Boston who carried news, messages, and documents around Massachusetts to cities as far away as New York and Philadelphia. And he was sympathetic to the growing independence movement in the colonies. Paul Revere had pre-arranged a light signal to indicate which way the British would come on their way to arrest Sam Adams and John Hancock in Lexington. If the British marched by land, a single lantern would be lit and placed in the bell-tower of Christ Church in Boston. If the British would row across the waters of Charles River to Cambridge and then go that route to Lexington where Adams and Hancock were staying, two lanterns would be placed in the tower. When the British troops gathered at the bank of the Charles River, two lights appeared in the bell-tower. The British would come by sea—over water. And thus began the midnight ride of Paul Revere.

Sound pressure waves travel slower than light and don’t go as



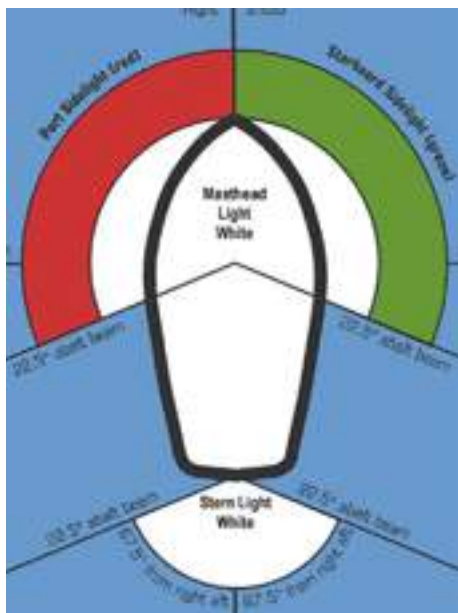
far, so light from fire and smoke has been used to rapidly send signals for much long distances.

Smoke has even been used to signal time. During the 1800s in Cape Town, South Africa, the Noon Gun sound of cannon fire was replaced by a puff of smoke to signal 12 o'clock so all ships in port could check the accuracy of their marine chronometers and better calculate longitude when underway.

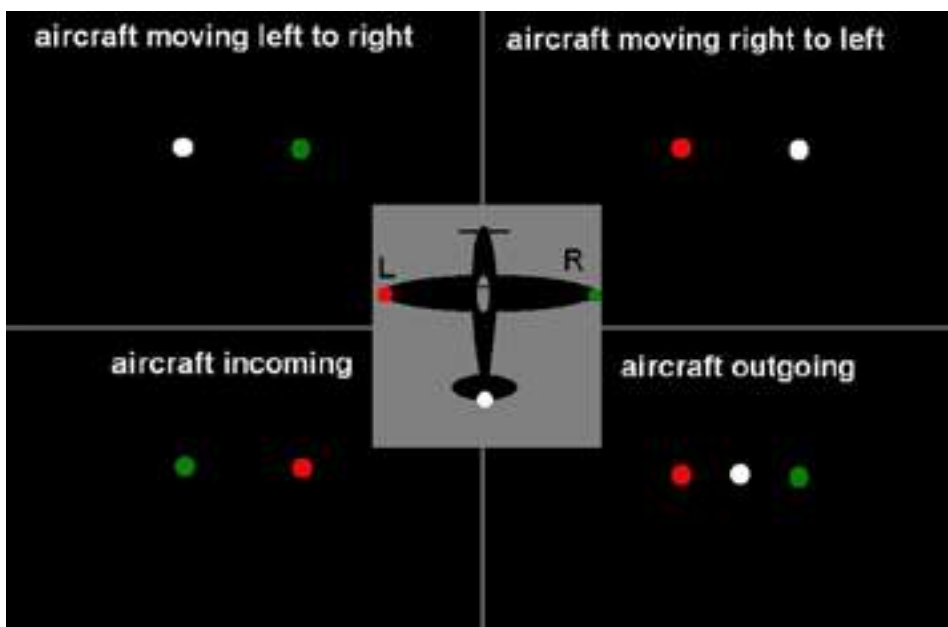
COMMUNICATING WITH LIGHT

Lights are used to convey information on ships and aircraft. Ships at sea mount lights on their vessels to indicate underway, direction of movement, or at anchor. These became known as the “Rules of the Road” to nautical groups all over the world. Their primary purpose is to prevent collisions at sea. A similar set of “Rules” apply for watercraft in inland waterways.

These lights have a specific color, range of visibility, and location on the ship. Green has been used to indicate the right side (starboard) of a vessel. Red is used to show the left (port) side. A high white light on a mast near the back half of a ship with a lower white light on a mast in front on the bow are “running lights.” The lower white light signifies the direction the vessel is pointing. These lights must be visible for six nautical miles.



Aircraft have a similar set of lights—a red light on the left (port) wing tip, and a green light on the right (starboard) wing tip. White navigation lights are mounted on the back edge of the wings and tail, and a similar white light is mounted on the bottom of the plane near the rear. Aircraft have special lights for ground visibility, and during takeoff and landing. Aircraft may also have strobe or rotating beacons to warn other aircraft of possible collision danger or to warn ground crews that engines are about to start.



HOW CAN YOU COMMUNICATE IN AN EMERGENCY?

You can apply some of these light signal ideas to your own situation. You may be sensitive about running a noisy generator that could tell others that you (and possibly food and water) are present, so you may prefer quiet power sources that don't tell others you are there. The same goes for using light instead of horns, megaphones, and shouting.

When power goes out at night, the presence of people can be seen by the flashlights and candles flickering or moving about in darkened rooms. Closed blackout drapes keep outsiders from seeing who is inside and how many of you there are.

To communicate with someone across the street, tape a mini LED flashlight inside an empty toilet paper roll. This focuses the light at the front of the flashlight into a narrow beam that can be seen by the receiver without letting

others know light communication is occurring. You could also use a rolled-up sheet of cardboard or magazine to focus the light. Practice using this light tube signal tool before it becomes necessary during an emergency.

To actually send and receive messages instead of static condition, adopt a code for your light signals. The most popular code consists of short and long flashes of light. The best I've found is Morse Code—a communication technique that changed history.

EMERGENCY COMMUNICATIONS: FLAGS

Visual signaling can be used when you want to maintain radio silence or your radio is not operable. Not only is it an excellent way to contact others without making a sound, you can also use this to create coded messages that other observers will not easily understand.

In the 1930s and 40s, people used ice boxes to keep food cold. A delivery vehicle came through the neighborhood each day to bring blocks of ice to homeowners. Ice can be heavy, so the people in the houses placed a cardboard sign in their front window to indicate to the delivery driver how much ice they wanted. On the sign they printed the number of pounds of ice they wanted the iceman to bring into their kitchen and place in the ice box.

During WWII, families placed a flag in their front window with stars to show how many in their family were serving in the military (or had died in action). Below is the flag that my mother hung in our living room window while my father was serving overseas during World War II.

Another place where special flags are used is during a pandemic. To keep healthy people from getting infected, a yellow flag for the letter “Q” can be used to signify that

there is disease inside and this location is quarantined—no visitors allowed. The yellow signal flag is hoisted on a pole, placed in the front window or mounted on the front door warning others to avoid that building. There is also a flag or sign for “radiation” to mark a radioactive area or container.

Now take this concept and apply it for visual communication when the grid is down and people are locked in their homes but want to know what's going on around them.

A signal flag makes an excellent message medium. In the military and on ships at sea, signal flag designs follow the International Code of Signals with each letter and number represented by a unique color or colors in a particular design pattern.

For example the letter “S” is represented using a white flag with a blue box in the center.

“L” is represented with a square containing a yellow and black checkerboard pattern.

Using colored cloth or colored school construction paper, you can create the signal flags established





by the government or you can create a custom set of signal flags. The key is: the simpler, the better. And both sender and receiver must know how to interpret the message being displayed.

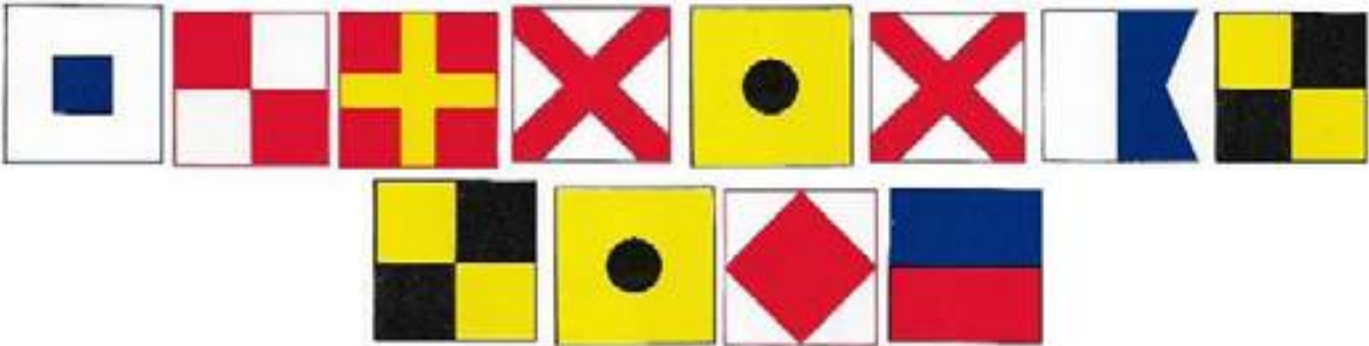
If you adopt the standard flags and establish a code for each flag, you can easily use these to communicate with people across

the street or up the hill. For example, you could designate a “W” to mean “water needed.” The “F” flag could mean “food needed.” Or “M” for “medical help needed.”

Or you could combine letter flags to indicate phrases such as “H W” for “Have Water” or “N M” for “Need Medical” service. In fact, complete words can be spelled out using

signal flags. (“Survival Life” on the bottom of this page).

There are endless ways to communicate with your family and neighbors using signal flags. Be creative. Be aware and stay informed.





WHAT TO DO WHEN YOU ENCOUNTER A BEAR IN THE WILD

..... By: Stacy Bravo

You're on a winter hike or camping trip with friends and family and to your surprise you see a bear, and it has spotted you. The first thought that crosses most people's minds in this very moment is, "I thought bears hibernated during the winter?!" Your next thought, perhaps... "What do I do now?!"

THE MISCONCEPTION OF BEAR HIBERNATION: THE DIFFERENCE BETWEEN HIBERNATION AND TORPOR

It is a common misconception that bears hibernate during the winter. While bears tend to slow down during the winter months, they are not true hibernators. Black and brown bears do go into a deep sleep during the winter months, known as torpor.

True hibernation is when animals "sleep" through the winter. During this sleep, the animals will not wake up when they hear a loud noise or even if they are moved or touched. Animals hibernate as a way to adapt to their surroundings. They have to be able to survive the cold weather. They hibernate to escape the cold and because food is scarce.

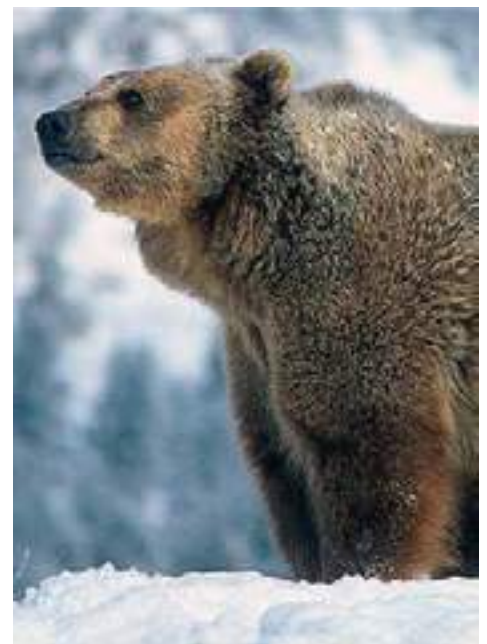
During a bear's dormant state, or torpor, their heart rate is extremely low but their body temperature is relatively high, and they won't eat or release bodily waste. While in torpor, the animal can wake up quickly and easily.

To get ready for torpor, black and brown bears will eat more than usual during the fall to store up body fat. During torpor, bears will use up this extra body fat to live off of while not losing any muscle. This allows the bear to come out of torpor thinner and still as strong as it was before winter. Bears will get their dens ready for torpor during the late fall. The bears get ready usually late November depending on when the cold weather hits.

For brown bears, once it really cools down (usually late November to mid December depending on the location), they will den up only to come out during the warmer days.

When they do come out, it's only for a short bit, and they are not very active during that time. They are quick to retreat back to their cave.

Black bears slow down and spend most of the time in their dens or caves; however, they still snack a little throughout the winter.



BEAR ENCOUNTERS

Bears are more active during the spring, summer, and fall months, but on the warmer days in the winter months when they leave their dens is when a possible encounter can occur. The temperament of a bear can vary (for a variety of reasons) with each season but, the safety measures or actions you take should always be the same whenever you encounter a bear.



WHAT TO DO DURING A BEAR ENCOUNTER: KNOW WHAT YOU ARE DEALING WITH

Remain calm and ready your bear spray (or other deterrent). Stay together if you are in a group; you will appear larger and more intimidating if you stick together.

Try to figure out whether the bear is a grizzly (brown bear) or a black bear. Grizzly bears and black bears tend to behave differently in a given situation, so it helps to know which species you're dealing with. The following infographic demonstrates the differences between grizzly and black bears.



If possible, try to determine whether there are cubs present or whether the bear is defending an animal carcass or other food source. Females with cubs or bears defending food sources may appear to act aggressively as they defend their cubs and/or food.

If you see a bear in the distance, respect its need for personal space. Do not approach it, even to get a photo, and give it as much room as possible. Consider turning around and leaving the way you came. If you must continue, take a detour and give the bear a wide berth. Bears can cover large distances in a relatively short period of time, so if you are camping, be sure to store your food well out of reach of any bears in the area.

A “DEFENSIVE” ENCOUNTER SITUATION

Sometimes a bear that feels threatened will “act” aggressively to defend against a perceived threat. This is often the case with a mother bear with cubs, a bear defending a food source, or a surprise encounter. The closer you are to the bear when it becomes aware of you, the more likely it is to react defensively. The bear may pop its jaws or swat the ground with its front paw while blowing and snorting, and/or it may lunge or “bluff charge” toward you in an attempt to get you to leave.

In this situation, the bear doesn't want to fight any more than you do. It is simply trying to communicate that you are too close. Try to appear non-threatening by remaining still and calm.

Ready your bear spray by removing the safety lock. Speak in an appealing voice and back away, increasing your distance from the bear. Leave the area immediately.

Defensive responses that result in physical contact almost always involve grizzly bears surprised at close range, on a carcass or protecting young. The very few defensive attacks by black bears have been females protecting cubs (but these are very rare).

If you encounter a bear on a carcass, get as far away from the bear's cache as possible; leaving the area quickly and quietly preferably in the same direction you came in. If the bear is about to make contact, use your bear spray. Do not play dead and do not act aggressively. Get as far away from the food cache as possible.

If a bear that is behaving defensively is intent on making contact, your first line of defence is always your bear spray. Point the nozzle just above the bear's head so that the spray falls into the bear's eyes, nose and throat. When it is 20 to 30 feet away, give it a long blast. That should be enough to discourage it and send it in the other direction.

If the encounter was a surprise or it involves a mother grizzly bear with

cubs, and the bear makes physical contact, fall to the ground and "play dead." Roll over onto your stomach and cover your neck and the back of your head with your hands. Keep your legs and elbows wide so the bear can't flip you over. When the attack stops, remain still and wait for the bear to leave. Do NOT get up until you are absolutely certain the bear is no longer in the area – even if you have to wait 30 minutes or longer.

REPELLING A NON-DEFENSIVE BEAR

Occasionally, a bear will approach you in a non-defensive manner. It may just be curious. Perhaps it's a young adult bear that is simply testing its dominance. Very rarely, it may see you as potential prey.

In any event, talk to the bear in a firm voice. Get out of its way if you can, which may be all it wants. If the bear follows you and it's attention is clearly directed at you, then stand your ground and prepare to use your deterrent. A bear that is initially curious or testing you may

become predatory if you do not stand up to it.

Act aggressively. Look it straight in the eyes and let it know you will fight if attacked. Shout! Make yourself look as big as possible. Stamp your feet and take a step or two toward the bear. Threaten the bear with whatever is handy (stick, pole, bear spray). The more the bear persists, the more aggressive your response should be.

If the bear attacks, use your deterrent and fight for your life. Kick, punch or hit the bear with whatever weapon is available. Concentrate your attack on the face, eyes and nose. Fight any bear that attacks you in your building or tent.

No matter the season, bear encounters should always be acted upon with caution. Bears are magnificent animals and like all animals, they should be treated with respect, but knowing what to do in a potentially life threatening situation with a bear is important.

