

Help prepare your family for a Hurricane, Ice Storm, Flood...

1. Preface

(Written 6 days after the Attack on America)

I've just received an e-mail from Christine G. of Toronto:

"A couple years ago you had a really helpful "Millennium Guide" with survival tips in case of disaster (like ice storms, etc.). The recent events in the US have reminded me of the importance of having survival basics. Is it possible to post your Survival Guide on your website again?"

Of course, I replied.

Alex Tilley

2. Background

In 1999 I believed that there was a fairly good chance that Y2K could hurt us. I was especially concerned about seniors in apartment buildings; they would be in grave danger if we lost electrical power in the midst of a Canadian winter.

'How would they survive the critical first few days?' I wondered. I ended up writing the attached and included a copy in each of our spring catalogues in 1999. Once a Boy Scout, ever a Boy Scout. I now see clearly what led to helping people by providing them with secure pockets hidden inside extraordinarily durable clothing.

By the time Y2K neared, I realized that my concerns were groundless. We joined others in celebrating the advent of the 3rd Millennium in a downtown Toronto hotel.

On September 11, 2001, a few days ago, the unimaginable occurred. Shocked Canadians wept for their American neighbours - and for a world forever changed. Wanting to do whatever we could to help, when we heard that the rescue workers needed underwear and socks, our Company immediately shipped over 1000 pairs of each to them. You come to know your true feelings for people when you lose them, and we learned that we cared deeply indeed.

Thank you, Christine, for asking. May knowing the following never become important.

3. The Nitty Gritty of Personal Y2K 'Insurance'

(If not Y2K, substitute the disaster of your choice: hurricane, tornado, ice storm
"That's impossible! Never will happen!", earthquake, flood, tsunami...)

by Alex Tilley

(Founder and Owner of Tilley Endurables, Inc. - and a former Boy Scout)

You have my permission to make and pass along copies of this article. In fact, I encourage you to do so.

4. You and your family's very survival may be up to you. I am referring to the Y2K problem and how you can help 'insure' against the possible effects it may have on you, your family, friends and neighbours.

In late January 1999, the World Bank declared, "(Y2K), while not Doomsday, will unleash a chain of problems that will touch everyone on the planet, with the most damaging effects hitting the least prepared." In November 1998, Bell Canada wrote to all its subscribers, "Lots of products and services you use could be affected by the Year 2000 challenge including telecommunications products and services. You may even depend on some of these for matters of critical importance, such as your livelihood. Ultimately, it is every person's responsibility to be ready for the Year 2000."

At the risk of being thought an alarmist (rather than an alertist?), I must speak to you of this, because alerting you in time may save your life - no kidding. How wonderful it will be if you will be able to laugh at me later! How very tragic if you are unable to. To learn for yourself the seriousness of Y2K, look up 'The Y2K Nightmare' in Vanity Fair (January, 1999). Also see 'www.russkelly.com'. One of your neighbours or your public library will have access to the Internet and will be able to help you. You will learn that no one knows anything for sure about what will happen, myself certainly included. This is why I urge you to 'insure' yourself against the worst, while hoping for the best.

In less than a year, we may lose our electrical power, and, to quote our military, "for a protracted period of time." When you hear our government and the Red Cross saying "store extra water," what they are really saying is "prepare your household for being without power."

**No power - no heat - no food - no water
' no telephones ' no banks ' no gasoline ' no job ' no money...**

AND NO TV!

It's called 'the domino effect.' You will learn that if power goes out, our telephones will go out (and vice versa). Our heat will go off. We'll lose our water supply. Darkened stores will run out of food in a few days. There'll be no gasoline. Credit cards won't be accepted, nor cheques.

And within a week or so, people will 'ask you to share' your food, water, heat and light.... In a prolonged, widespread power blackout, city people would run out of food and water quickly. To those who have never experienced the loss of food or water, the real worst is nearly unthinkable. (There are a number of 'worsts'.)

5. In the near future, this may be your family's most important "insurance"

Only a small part of the Y2K problems may come in early January 2000. Wise people will 'insure' themselves for months, remembering that they get to keep the 'premiums' if nothing untoward happens.

The earlier you purchase and begin *warehousing* supplies, the better off you and others will be, because your early action will alert manufacturers to increase production. The more that our governments delay advising people to look after themselves, the worse will be the panic, and the greater the potential loss of life.

If you wait until autumn - as most people will - it may be too late. It seems that electrical generators, for instance, are nearly all gone. "Better to enjoy life as it is without thinking too much about the future, eh?"

Human nature is strange

We spend thousands of dollars each year insuring our lives, our homes, and our cars against catastrophes which have only the barest chance of happening in the next year or two. Yet hardly anyone will 'insure' themselves against Y2K - where the odds of something bad really happening are probably a hundred times greater - until it's too late: autumn 1999. Squirrels, sensing a hard winter, squirrel away extra food. But not many of us will. And we who do, will be asked to share.

Logically, don't you think that the odds are far greater that you'll suffer because of Y2K than being injured in a car crash, or having your home burn? If you won't prepare for Y2K, why would you ever insure your car or home? If you insure your life and property, why wouldn't you take out Y2K 'insurance'? **The best insurance coverage includes having neighbours who are fully 'insured' too!**

6. Enough doom and gloom

We humans are wonderfully resilient and inventive and we will not be kept down for long! But it may take some time until, together, we get things up and running again. *To get as many people as possible through the potentially difficult times is the purpose of my researching and writing this brochure.*

ONCE A BOY SCOUT, ALWAYS A BOY SCOUT... *I'm a great believer in "Being Prepared", especially when the cost and inconvenience is minimal.*

Suggestions on how to survive in a city without electric power

I gleaned the following information from a variety of sources, including survivors of the Ice Storm of '98. Double-check my suggestions with professionals in their respective fields. *They reflect years of slow-growing common sense, and are what I believe to be sound as of February, 1999, but I am not an authority nor expert on anything! You may have better ideas and if so, please write to me (900 Don Mills Road, Toronto, Ontario M3C 1V6 Canada; alextilley@tilley.com) so that I can improve upon these suggestions. (We'll keep a current version on our web site: www.tilley.com.)*

You and your family need some safe way to warm part of your house or apartment; you need food, and especially drinking water. Without heat, a home or apartment will lose about 1°C (2°F) per hour. Remember how cold it is in a detached car garage? Picture the garage nicely painted, with windows, rugs on the floor, paintings on the wall, and furnished. It's still miserably cold and that's about how cold your home will become without electricity or alternate heat. By the way, it is also possible to survive in that kind of cold. It depends on your clothing, preparedness, knowledge, ingenuity - and attitude.

If you can (and you can), drive South in early December 1999. Book early! Or consider whether you can live with a well-equipped-for-survival farm family for a while, especially one that would welcome your help milking cows, etc. *If only you had friends among the old-order Amish, who don't ever use electricity -but who make great desserts!*

7. How to heat your home

Get a large, high quality, convection-type kerosene heater, spare wicks, and lots of fuel immediately. Propane heaters can give off deadly carbon monoxide gas and are not recommended for indoor use. Propane gas is highly explosive; kerosene isn't. A kerosene heater I like (*having seen no others; I tend to make up my mind quickly, and repent at my leisure*) is one made by a Toyota affiliate, the Kero-sun. It meets or exceeds the stringent requirements of CSA testing and certification, has some rather nifty safety features, and emission levels are low. This is a fuel-burning appliance, and you'd be dead-wrong not to read the operating instructions of anything that affects the air that you breathe. With one you can heat about 350 to 600 square feet of living space. The price is in the \$300 to \$450 range, depending on the model.

Get extra wicks. In Canada, Home Hardware carries this heater, plus large containers of low-odour kerosene fuel. The fuel sells for about \$27 for 19 litres (approx. \$US16 for 5 gallons) which will power a heater for about 80 hours, or half a week.

How much fuel?

Err on the side of caution. ("About 8% of the Y2K problems will occur in the first two weeks," say the consultants, the Gartner Group.) Once the power comes back on, presume that it will go off again! And again! If the power stays out, Spring will be a long time coming.

A **wood-burning fireplace** is beautiful to watch, but if there are no glass doors it will draw heat out of a room. A fireplace insert, especially one you can cook on, is helpful but without power its fan won't work and its ability to warm a room is thereby limited. Get at least a cord of wood for your fireplace, and store it inside your home.

Best types of firewood: oak, beech, sugar maple, yellow birch; moderately good: other maples, tamarack, pine, other birches; poor: hemlock, red spruce, poplar, balsam fir, white pine. The poorest have about half the heating value of the best.

Which kind of cooking stove should you get?

Propane stoves can be dangerous if improperly connected. Coleman stoves come in 2 types: naphtha and propane. Either can do the job but require ventilation. Apparently the naphtha ones are better on a cost-per-hour basis but people choose propane over naphtha about 4 to 1, because of propane's convenience. Estimate your fuel needs then double it. Barbecues produce **deadly** carbon monoxide gas and are never to be used indoors.

Wick-type stoves-in-a-can are available in sporting goods stores. Here's how you can use them to cook on your kitchen stove: support an oven rack with bricks and place 1 or 2 wick-type stoves under the rack. Buy your stoves and fuel immediately. Purchase lots of matches or lighters. Buy some for your neighbours! Always presume that a dangerous gas (one that you can't see or smell) is being given off. Keep your room ventilated. Get a carbon monoxide detector, one that also works from a back-up battery.

Get lots of spare batteries for it and for your smoke detectors. Many deaths during the Ice Storm resulted from fire, hypothermia, and carbon monoxide poisoning. Check that your neighbours have some detectors and batteries. If they don't, buy some for them, so a fire in their home won't burn down yours too.

8. Failure to prepare ... is preparing to fail

Without water you will die in a few days. You can survive without food much longer. Why not have quite a bit of both? But don't be the only one on your block who has them! Each person needs about a gallon (about a third to a half of a bucket) of potable water per day, or 30 gallons per month, for drinking, for cooking, cleaning teeth.... Each person also needs about a gallon of not-for-drinking water too, per day, minimum, for doing the dishes, bathing, laundry....

How to store drinking water

You can use cleaned-out 2-litre (about half a gallon) Coke-type bottles. Don't use former milk containers because of remaining bacteria. You can purchase large bottles of spring water. You can store water in hundreds of large **Ziploc bags**. Double-bag them if you're worried. The clear, plastic, collapsible water containers with a red spout, which you've seen on picnic tables, sell for about \$8 and hold 20 litres. I think I'd go with Ziploc bags. The seal on their opening is very strong and you could store hundreds of Ziploc water containers in a spare room and under beds or in a spare bathtub.

I imagine you could line up, say, 30 along a wall, then place an 8" board over them and make another row above the first. And up and up! Perhaps you could use piles of hardcover books as additional supports for the boards. *Whatever you use, leave extra air space so that if the water freezes, the ice has room to expand. The rate of expansion is about 10%, but allow for 20.*

As a further backup, your hot-water heater holds about 45 gallons of drinkable water. *(Without turning off its water supply, drain it in December to remove unsightly but apparently harmless sediments; you can remove remaining sediments by passing the water through a coffee filter or closely woven cloth - like "TilleySilk.")*

How to store non-drinking water

The easiest way is to purchase and use the large (25 or so gallon) Rubbermaid-type garbage containers. Rubbermaid cautions us not to use them to store potable water because poisonous chemicals could leach out of them, ones that wouldn't be neutralized by adding a dollop of chlorine bleach to the water. (I've mentioned this as some - not you of course - would otherwise try it.) I'm not suggesting that you should store non-drinking water in them. But I would. As a family needs a lot of water, several of these huge containers could be used to store water that is NOT going to be used for drinking or cooking. Having a hose or tube to use as a siphon might help.

9. How to light your home

I've looked into using candles but they don't give off much heat, they're hard to read by, and they're potentially dangerous. *If the near-worst were to happen, there'd likely be a lot of fires caused by candles.* If you decide to use them, consider using duct tape to stick them onto a flat plate to ensure they won't be knocked over. Never leave a burning candle unattended and keep them out of reach of children and pets.

Instead of candles...

There are Coleman lanterns, which produce a very bright light, and even the old-fashioned (but still available) coal-oil lamps. Get lots of fuel, wicks, mantles - and train your whole family how to use them and fill them safely. *(At age 11, I got a memorable burn when I clutched the chimney of a glowing coal-oil lamp!)* Get them while you can! I also recommend a particular flashlight, the 6-inch-long Mini-Maglite that operates on 2 AA batteries. It's much better and safer than a candle.

Here's how to turn a Mini-Maglite into a kind of powerful candle: unscrew the wide end (which has the glass and reflector but not the bulb) and place it glass-side down on a table. Put the butt end of the flashlight into the opening in the wide end. The wide end becomes a wonderfully designed 'candle holder' with the bare bulb providing significant light. You can also turn this small, powerful flashlight into a dangling ceiling light. A great product! And no, I don't get a commission. *Hmmm...!!* To make your home more cheerful, you could use duct tape to stick light-reflecting aluminium foil to your walls.

You'll need at least one flashlight per person, plus spares. The flashlight batteries will last for about 5 hours of steady use. *(That's about 2 batteries per flashlight per day.)* The best deal I've found for batteries is at COSTCO stores; I tested their 'Kirkland' house-brand and found them to be about equal to Energizer, and at a cost of about half that of other batteries. I reckon that about 1000 AA batteries (gasp!) would be needed for a family of four during a 3-month period. (That's only about \$6 or \$7 a day. Think of the money you'll save compared to paying for electrical power!) Remember, you'll also need batteries for your lifeline: your two all-important transistor radios which will entertain you, and inform you about what's happening at home and abroad. Count on your neighbours not having enough, and be prepared to be generous, as they will be with you. A sign on a house: "Will Trade AA Batteries For Toilet Paper"? Speaking of which...

10. How to go to the bathroom when there's no running water

Go ahead, laugh! Everyone in my office did.

I'll use words from our childhood because they're more easily understood and user-friendly than (ugh) feces, etc. (If you can't poo, drink lots of water, eat fibre, and get out for some exercise. Enjoy this special time! *Ski down the main street!*)

Here's what you'll need for three months for four people: 150 or so white kitchen-size garbage bags (they're about 20 x 22 inches); duct tape; a 3-foot pile of old newspapers; a good-sized cup; a plastic bin about 2 feet high; two big, plastic garbage containers with lids; toilet paper (get a few hundred rolls; they'll be good to barter with); Handiwipes or such, and a deodorizing room spray. *Nervous yet? Don't be!*

Since the toilet won't flush, the idea is to pee in one place (the plastic bin) and then poop in another. It makes for easier and safer disposal if they are kept separate. (I experienced this technique on a rafting trip through the Grand Canyon: toilet seats were fitted upon old, large ammunition containers; you peed in one then pooped in the other. The pee was later used to warm the river; the poop was rafted out of the canyon.)

To set the scene...The toilet has little or no water in it. If there's water, you've added some anti-freeze or winter windshield-washer liquid to it. Cover the bottom of the toilet bowl with a dish or something to give the garbage bag something wide and flat to rest on. Lower the toilet seat onto the toilet bowl; *it won't get raised again for the duration.* Place an opened white garbage bag inside the toilet bowl; lift its spread-opened top over the toilet seat (so that you'd be sitting on the garbage bag) and attach it more or less permanently to the toilet seat with duct tape. Next, place another garbage bag inside the first, and attach it also to the seat with small pieces of duct tape. *(Now you'll be sitting on 2 layers of plastic garbage bags.)* This garbage bag will be gotten rid of on a daily basis. The first garbage bag is in case the second one rips; the plate in the bowl distributes the weight of the contents, which reduces the chance of a tear. *(That's tear, which rhymes with err. Expect both types from time to time.)*

If you intend to squat over the bin while peeing, **make sure that the plastic bin won't fall over.** Perhaps locate it close to a hand-rail so that the user won't lose his or her balance. Later, pour the pee into a large plastic garbage container that's out on the back porch, or balcony. Place any toilet tissue into the garbage bag in the toilet bowl. Then move over to the toilet. Sit and relax. Later, place a folded-up newspaper page over the poop. It helps to cut down odours and adds to the aesthetics. A deodorizing spray, a closed lid on the toilet, and a pretty towel over the plastic bin, all add to the aesthetics. If there's a persistent odour, perhaps try dropping in a pinch or two of baking soda. Because the toilet seat will be cold, buy a small piece of carpeting and cut a hole in it the same size as the hole in the toilet seat. Place it on the toilet seat, rest and think of summer... and of all the things you could do in a Tilley Hat.

11. Some other suggestions

"Getting testy, aren't we?"

After a few days together in a small space, you will start to get on other people's nerves, and vice versa. During the day, get away from each other; visit separately with other people; arrange outings with neighbours.... Adventure awaits.

Clean body, clean mind... the choice is yours

During this time, it will be important that people keep their nest neat and clean, and themselves too. Take great care with your appearance; never will nicely combed hair, a bit of perfume, nail polish and lipstick be so appreciated. Women should take pains to look their best too!

Buddy, can you spare a ten?

Since credit cards may not work, have lots of cash (but you can't eat or drink money). Short of cash? In November, ask for a one-month respite on a mortgage payment, or offer a bonus if the landlord will wait for December's rent until January 5, when you'll see how your world is. Hide cash in 3 different places so if you have to give up one place, there's more left. (I'm certainly not going to prepay my loan and mortgage payments; if I'm out of work, the bank's staff will be too, I guess.)

Waddayamean I didn't pay!

Keep a record of all bills you've paid and financial transactions you've made in the last few months of '99. If records are lost (improbable in Canada) it will be up to you to prove you've paid! Talk to your bank manager to find out how you can rest assured that your money on deposit will still be there in 2000.

12. Oops, don't forget these!

Make sure you have a hand-operated can opener - and another for a neighbour. And lots of matches. You can buy wind-up flashlights and radios. Fill up your car's gas tank in late December. Get and store spare gasoline in some safe place (check with the fire department for safe storing suggestions). Unplug all appliances. Make sure the stove is turned off. An oil-company expert told me that gasoline can be stored for about six months (twelve if you add a conditioner which, say, a lawn-mower repair shop could probably sell you); after that, some additives precipitate which could gum up the works. No matter its age, it'll always make a heck of a bonfire, so be cautious as can be!

What else will I need?

Begin a list, writing down every article you use, so that you can stock up on supplies. See www.y2kwomen.com for a pre-made list. Look for long-lasting tetra-packed milk and custards; vacuum-sealed sausages; get 'instant oats,' corn meal, Cream of Wheat, Cup-a-Soup, beef jerky, dried fruit... matches, batteries, soap, candles, chocolate bars, coffee, contraceptives (remember: no TV!), powdered milk - you name it! - all will be needed by you and/or your neighbours. Don't forget very thick (= warm) sleeping bags, and fire extinguishers (large size if you live in an apartment building).

Get masking tape, and duct tape. Save all plastic bags. Get several plastic drop sheets (for tents above beds), 100 feet of strong 1/4-inch cord, 6 large-sized, heavy duty screw-eyes; chlorine bleach (not the perfumed kind); Tang or such to mask chlorine's taste; manual shavers; wine, cheese and crackers.... Get your neighbourhood organized and working together. United we may stand, separated we will fall, especially in a city. See www.utne.com/y2k for suggestions on how to organize your neighbourhood.

The pipes might freeze...

To drain your water pipes, turn off the main water supply. Next, turn on the taps in the basement and open your taps in the top-floor bathroom so that air will escape. Detach and drain laundry and dishwasher hoses. Drain the water heater at the last moment, as it's a drinking-water reservoir. Get some windshield washer anti-freeze in case you need to protect your toilets. Wrap a lot of cloth around the main water supply pipe that leads outside (and which will have water in it) to help stop it from freezing and rupturing.

13. Thickness = Warmth

About keeping warm: A vacuum is actually the best insulator (Thermos bottles), but air trapped in tiny pockets is the next best. The thicker the insulating materials, the more air is trapped, and the warmer you will be. A bed's mattress is a poor insulator because air moves within it so cover your mattress with a thick foam pad. Remember that the body loses about half of its heat from the head and neck area, and that it should be as thickly insulated as the rest of the body. "Cold hands and feet? Put on a toque and scarf!" Wrap your head and neck in a thick turban or such when you sleep in a cold room. It's better to eat cold food than no food at all; food creates bodily warmth. If you're cold and you haven't sufficient thick clothing, you can crumple up newspaper and stuff it inside your clothing to keep warm. Remember that mitts are far warmer than gloves. A 'space blanket' is useful because it radiates your own heat back at you. I imagine you could make your own such blanket with aluminium foil, good ol' duct tape, staples (?), and a sheet...Ouch! Cold going to bed?

Cuddle with someone who is also wearing pyjamas (thickness = warmth). A family dog generates a lot of warmth ('It was as cold as a three-dog night!'). Use hot-water bottles and wrap them in a towel if too hot. If you go to bed feeling warm when the outside temperature is cold, you'll wake up if you get cold and start shivering. On the other hand, if you go to sleep so cold that you're shivering, the bed has no way of becoming warm and you may not wake up period.

At last, time to relax!

Get games and books to pleasantly pass the time. What an excellent time to learn how to play bridge or euchre, or chess, or to knit a sweater! Meet your neighbours! Apropos of nothing, remember the amazingly high number of births in New York, nine months after the power went off in the 50s?

The only draft I like is liquid

Put plastic sheeting over windows to trap air and create additional insulation. Two layers 1/4-inch apart would be even better. Be inventive.

Other ideas

Fill your drug prescriptions; have enough for perhaps half a year or more, if the drugs are essential. Get vitamin pills. Buy lots of rice, pinto beans and corn. A hundred pounds of each should feed one adult for four months, at a cost of about \$5 per day. Pasta has high nourishment value. Get lots of sauces. (I don't cook so look elsewhere for guidance.) If hungry people call on you, try to have food available; lots of it. (They say that 'interesting times' bring out the best, and the worst, in people. I wonder how I'll react. As always, I guess, and I hope with good humour.)

14. Here's what you can do

Make 100 copies of this booklet. The more people you give a copy to, the better off everyone will be. Mail them to your friends; give them to your neighbours. Ask them to care enough to make 100 copies too, to pass around.

These suggestions were compiled by someone who, in 61 years, has seldom been without heat, power, water, food, shelter, friendly neighbours - and gas. Our family-owned company, Tilley Endurables, is known for the quality and practicality of its travel clothing and Tilley Hats. But because Y2K will be a cold-weather situation, our Company hasn't that much to offer you.

There is one item which would be very helpful, however, to help you stay feeling clean. It's our 'fast-drying, sweat-defying' underwear. You would wear it under your long underwear, and, every day or so, you'd remove your Tilleys, wash them, and put on another set while the first dries. That way, even though you didn't have a chance to change or wash your long johns, an important part of you feels clean. Our unique undershirts, which have short sleeves, will keep you much warmer

than if you didn't wear one. The underpants are always comfortable, and virtually never feel damp. I'd recommend that fast-drying liner socks (you'd get them at a sporting goods store) be worn under regular socks for the same reason. During 1999, we will provide our underwear at a 25% discount if the purchaser whispers to our staff, 'these are for Y2K.' The limit at a discount is 2 per person - which is all anyone really needs. If you would like a catalogue (it's been a frequent prize-winner over the years) phone us at **1-800-ENDURES** or visit us at **www.tilley.com**.

Whether it will it be a Grand Adventure - or a period of misery - is up to you. While hoping for the best, we must begin to prepare for the worst, and to prepare NOW, while there is still time. And if a really bad version of the worst looks like it will happen, insure yourself far in advance. Be ingenious - just like the young hero of "Home Alone". God bless, and in the spring of 2001, may we all have a good laugh over this.

Your friend,

Alex Lilley

P.S. My lawyer has suggested adding these words: this document provides guidance and advice. However, because of its general nature, nothing you read here constitutes legal or professional advice.

Tilley Endurables

Tilley Hats and the finest travel clothing in the world

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