Newsletter

Southeastern Game Bird Breeders & Hunting Preserve Association

No. 9, 2020

Combat Skin Issues While Wearing Face Coverings

The skin is our largest organ and protects us from the environment

PUBLISHED ON August 30, 2020

ATHENS, Ga. — Adding to the other little irritations caused by wearing masks — slippage, missed cues, muffled sound — masks can also cause skin irritation, so it's important to know how to care for your mask as well as your skin.

The skin is our largest organ and protects us from the environment. Its full-time job is to continually regenerate and produce its own moisture every day. However, most of us are not used to having to wear a mask on our face, and our skin isn't used to it either.

You've probably heard by now the importance of wearing a clean mask, but it is the first step to avoid skin problems — now commonly called "maskne" — when wearing it.

The Centers for Disease Control and Prevention (CDC) recommends washing cloth masks after each use. You can include your mask with your regular laundry, using normal laundry detergent and the warmest appropriate water setting for the cloth type. Be sure to dry your mask too, whether in the clothes dryer or by air drying. In the dryer, use the highest appropriate heat setting and leave it in until completely dry. Air dry your mask by laying it flat to dry completely. It is best to place it in direct sunlight if you choose to air dry.

You can also wash your mask by hand. Prepare a bleach solution by mixing 5 tablespoons (1/3 cup) household bleach per gallon of room temperature water or 4 teaspoons household bleach per quart of room temperature water. Check the label to see if your bleach is intended for disinfection. Some bleach products, such as those designed for safe use on colored clothing, may not be suitable for disinfection. Ensure that the bleach product is not past its expiration date. Never mix household bleach with ammonia or any other cleanser. Soak the mask in the bleach solution for five minutes, rinse thoroughly with cool or room temperature water, then dry.

In addition to wearing a clean mask, you should also take extra care to keep your

skin clean. Augusta-based dermatologist Allison Paine has noticed a few patterns when it comes to mask complaints. “The most common complaint is breakouts of acne from the mask and the second most common complaint is dry nose and mouth, runny nose and mask mouth,” she said.

Wearing a mask that rubs against your skin is irritating and accounts for the “frictional acne” people are experiencing, said Paine. She recommends choosing a mask that is breathable, washable and does not create irritation to your skin to alleviate both concerns, and to focus on a consistent hygiene routine for skin and dental care.

Take extra care of your facial skin as well as the inside of your nose and mouth to avoid extra irritation when wearing a face covering. To prevent skin problems while wearing a mask, follow these guidelines from the American Academy of Dermatology.

1. Cleanse and moisturize your face daily. Gentle skin care can prevent skin problems. Wash your face with an antibacterial product. Paine suggests a product with 5% or less benzoyl peroxide, and be sure to use a silicone/dimethicone-based moisturizer afterward.
2. Protect your lips by applying petroleum jelly. Dry skin and chapped lips are common mask-related skin problems. To prevent breakouts, take care to apply the petroleum jelly to your lips and not the surrounding skin. The inside of your nose can feel like chapped lips, so it can also be beneficial to use petroleum jelly up the entrance of your nasal passageway.
3. Skip the makeup when wearing a mask. Beneath a mask, makeup is more likely to clog your pores and lead to breakouts. If makeup is necessary, use only products labeled “non-comedogenic” or “oil free.”
4. Avoid trying new skin care products that can irritate your skin. Wearing a mask for even a short time can make your skin more sensitive. To reduce skin problems, avoid trying harsh products, such as a chemical peel, exfoliant or retinoid, for the first time.
5. Use a smaller amount of certain skin care products if your face becomes irritated. When you cover your face with a mask, some skin care products that you’ve used in the past, such as aftershave, may irritate your skin.
6. Wear the right mask. To reduce skin problems, look for masks that offer comfortable, natural and breathable fabric, such as cotton. Avoid synthetic fabrics, such as nylon, polyester and rayon. Choose masks that feel soft on the inside if you have sensitive skin.
7. Take a 15-minute mask break every four hours. Health care workers on the frontlines of the coronavirus pandemic have found that this helps save their skin. Of course, only remove your mask when it’s safe to do so and

after washing your hands.

8. As mentioned before, wash your cloth masks often. After washing, check its shape. If a mask no longer fits snugly and comfortably, it is less protective.
9. Continue the treatment plan that your dermatologist created for you. If you have a skin condition, such as acne or rosacea, it's especially important to follow your treatment plan. This can help keep the condition under control.

Additionally, dental hygiene will help combat "mask mouth" according to Paine. Be sure to brush your teeth after each meal, floss, use mouthwash and perhaps even invest in a tongue scraper. Drinking lots of water to stay hydrated will also help to keep your skin and mouth healthy.

–Leigh Anne Aaron, UGA Extension

Video: Applying Poultry Litter to Small Grains

Poultry litter, dairy manure, and swine manure contain varying levels of zinc and copper

PUBLISHED ON September 14, 2020

STATESVILLE, N.C. — Thinking about applying poultry litter in the fall prior to a small grain? Dr. Steph Kulesza, Extension Specialist in Nutrient Management and Animal Waste, shares some important information on keeping your fields in good condition in this video:

Click here to view the video

Use your waste analysis and soil test reports to make application decisions to avoid zinc or copper toxicity. Poultry litter, dairy manure, and swine manure contain varying levels of zinc and copper, and while these micronutrients are necessary for crop production, they can accumulate over time with repeated manure application, becoming toxic to plants in extreme cases. If the Zinc-Index (Zn-I) or Copper-Index (Cu-I) exceeds 3000 on your soil test report, application of manure should cease, as all manures contain some quantity of these micronutrients.

If you see a toxicity issue, soil turnover and liming are two of the only options for growers. However, soil turnover should only be used once, with no further application of zinc or copper-containing fertilizers (including manures) to avoid further issues. Growers should also be careful not to expose acidic subsoils through this process. When liming to a higher pH, manganese deficiency can become an issue so keep a lookout for manganese deficiency symptoms and

apply a foliar fertilizer if symptoms arise. At the end of the day, the best strategy to manage zinc and copper toxicity is to avoid soil accumulation using soil testing and waste analyses.
Read more at: https://smallgrains.ces.ncsu.edu/2020/09/video-applying-poultry-litter-to-small-grains/

–Jenny Carleo, N.C. State University

Clemson Study: Prescribed Fire Doesn't Hinder Forests from Producing Clean Water

Forest lands occupy approximately two-thirds of South Carolina's land area

PUBLISHED ON September 1, 2020

I personally have participated in burning management on several hunting preserves.

CLEMSON, S.C. — A new study by Clemson University researchers lends further credence to the effectiveness of prescribed fire as a forest management tool that does not adversely impact ecosystem health by increasing sediment or nutrient runoff.

With the largest mountain wildfire in South Carolina history still fresh in the memories of many in the Upstate, that distinction is important because a primary reason for the use of prescribed fire is reducing the likelihood and severity of wildfires by reducing the amount of litter such as pine needles and fallen leaves available to — quite literally — add fuel to the fire.
In a review entitled "Prescribed fire effects on sediment and nutrient exports in forested environments," Clemson researchers Kipling Klimas, Patrick Hiesl, Donald Hagan and Dara Park concluded that though sediment in runoff increases after prescribed fire in certain situations, these erosion events are associated with intense precipitation shortly after the fire and do not impair ecosystem function.
"These prescribed fires are beneficial not only to the ecology here, but we've been able to show that lower-severity burns, which are typical of prescribed fires, do not cause the same amount of soil loss as higher-severity burns characteristic of wildfires," Klimas said.
Klimas cited the wildfire that was ignited by an escaped campfire in November 2016 at Table Rock State Park as an example of the destruction wildfires can cause and evidence for the benefits of prescribed burning. After a dry fall season

and with an ongoing drought in the Upstate, the Pinnacle Mountain Fire grew to 10,623 acres — making it the largest mountain wildfire on record in South Carolina — by the time it was controlled after burning for more than a month, according to the S.C. Forestry Commission.

“We hope this study can raise awareness to anyone who’s living in some of these long-burned areas in the Upstate,” said Klimas, who completed the research as part of his master’s studies. “Because there were private landowners who were affected by these wildfires in 2016 — who lost land or their property was damaged — so hopefully being aware that this practice (of prescribed fire) won’t harm their property, won’t cause their ponds or streams to get clogged up with silt, will be beneficial. There’s still a lot of public skepticism.”

Klimas, a native of Houston, Texas, completed the project as part of his Clemson master’s work and graduated in May 2020. He is currently working on his Ph.D. at Utah State University, as he continues to study wildfire.

“My research at Clemson uniquely qualified me for my current position,” he said.

Forestlands occupy approximately two-thirds of South Carolina’s land area and its $21 billion forestry industry represents the state’s top manufacturing industry. But while prescribed fire has long been considered a powerful and effective management tool, few previous studies had sought to quantify the impact of fire effects on forest health and water quality across varying environments and scales.

“Research has shown that prescribed fire is an effective tool for accomplishing various forest management goals, such as fuel reduction, ecological restoration or maintenance of ecosystem services,” said Hiesl, an assistant professor of forested operations who served as Klimas’ graduate advisor during the research. “But because this technique is an anthropogenic, or manmade, disturbance that is used annually on millions of acres of forestland around the world, it is also important to understand the extent to which prescribed fire accomplishes intended management goals without compromising the ability of the forest to produce clean water.”

Thus, the study sought to analyze sediment and nutrient runoff data across varying samples and scales, from a small-scale rainfall simulator assembled by the researchers outside Lehotsky Hall, which houses Clemson’s Department of Forestry and Environmental Conservation, to large-scale watershed analysis.

The assessment of nutrient and sediment runoff yields is important because while forests are an important source of clean water globally, and watersheds are often managed to provide clean water to urban populations, a primary concern associated with fire is elevated surface runoff and erosion caused by rainfall events following the fire, due to their ability to transport pollutants including

sediment, macronutrients or other organic compounds into water systems.
“After fire, erosion and soil loss and soil mobility is the greatest concern associated with fire or any sort of forestry harvesting operation,” Klimas said. “So, that’s why we’re looking specifically at sediment. When you get sediment into streams — because we have trout waters up here in the Upstate, we’ve got streams that feed into municipal water supplies — it can reduce the productivity of the water body, it can kill off aquatic organisms and have other detrimental effects to that ecosystem. The streams coming out of the Blue Ridge Escarpment right here in the Upstate, around Table Rock Mountain and Caesar’s Head, they are all really important for downstream water quality.”
Filling those knowledge gaps about sediment and nutrient export from forested watersheds after prescribed fire is not only necessary to quantify the impact of prescribed fire on water quality, but the study also showed that high fuel consumption along the forest floor — which is uncommon during prescribed fire but rather indicative of a wildfire that prescribed fire could have helped prevent — increases the risk of erosion and export during precipitation.
“With increasing litter consumption, so as the fire burns more of that fuel along the forest floor, any sort of rain event afterwards will produce greater runoff and erosion,” Klimas said. “So, we saw greater sediment in the runoff as the burn severity — or the amount of litter fuel consumed — increased across all forest types.”
The study analyzed nutrient and sediment yields across varying burn severities — from very low to moderate to high-severity burns — in order to analyze not only the benefit of prescribed fire on forest and watershed health, but also to analyze any potential drawbacks, as well. Along with using burn severity as a variable, the study also analyzed three types of forest: pine, oak and a mixed pine/hardwood forest.
Existing studies that considered the effects of prescribed fire on sediment yield in surface runoff have cited high burn severity or a significant reduction in understory vegetation as the factor responsible for increased erosion. High-severity burns, which consume a significant amount of the protective litter layer, expose underlying forest soils to the full heat of the fire, which, at temperatures as low as 200 degrees Celsius, can actually impact soil structure such that it causes the development of a water-repellent, hydrophobic soil layer.
“What that means is less water is penetrating the soil and is being carried over land as runoff, which is largely attributed to that litter,” Klimas said. “Because when you’ve got leaves, you’ve got pine needles, that slows down water and allows it to percolate down into the soil.”
The study suggests that although prescribed fire can significantly increase sediment yield and erosion, these increases are ecologically negligible in many

events, particularly when compared with the erosion impact of other forest management practices. Forest managers typically target lower burn severity, as it has been shown to reduce surface runoff velocity and sediment volume inputs into water systems.

“The results of this study are encouraging, as they demonstrate that prescribed fire likely does not detrimentally impact soil and water quality in the region,” said Hagan, assistant professor of forest ecology. “So land managers — many of whom are interested in expanding their prescribed fire programs — can burn without fear of compromising ecosystem services and environmental quality.

The study also concluded that future research on water quality from forested environments after prescribed fire should be broadened to include better understanding of fire regime interactions at watershed and small-plot spatial scales that determine burn severity and landscape-scale documentation of post-fire erosion events and subsurface nutrient pool response.

“Part of the rationale for the study is that prescribed fire is, obviously, a human-induced disturbance and we want to make sure that something we are applying to the landscape is going to be as beneficial as possible,” Klimas said.

—Steven Bradley, Clemson University

Simple Ways to Keep Backyard Chickens Healthy

I have visited many game bird operations that also had a variety of different birds, including chickens. It's important we learn how to keep our birds healthy.

With proper monitoring and proactive care, keeping backyard chickens healthy can be easy

PUBLISHED ON August 18, 2020

SIOUX FALLS, S.D. — For some, having backyard chickens means sharing experiences of raising animals with their children while also teaching them responsibility. Others raise a backyard flock because they want to know where their food comes from and they enjoy the freshness of the eggs. Still, others tend to chickens because it’s a fun hobby or they consider them pets. But for the majority of backyard chicken owners, it’s a combination of all of those things. Plus, unlike other traditional farm animals, chickens don’t require a lot of space, so even those living in urban and suburban areas can keep a few chickens on their property.

Plant-based products that include essential oils, like Chicken E-lixir® will help promote the health and vitality of your flock. (Courtesy Photo)

Whatever the reason, keeping backyard chickens has grown in popularity over the past five years. There are countless websites, social media groups and periodicals dedicated to the growing trend. When the Covid-19 pandemic hit, the already trendy hobby became exponentially more popular.

Dr. Robert Stock, Director of Poultry Research and Development Ralco says he's seen the impacts first hand. "A lot of the chick suppliers are completely sold out this year. And they sold out early. So a lot of people have decided that if they're going to stay home, they might as well have these chickens, get their own eggs, and they don't have to worry about grocery stores running out of eggs."

Just as someone might do when bringing home a new dog or cat, it's important to research and learn as much as possible about maintaining the overall health and well-being of backyard chickens. Knowing the risks the birds are subject to and the proper way to care from them can truly be the difference between life and death for some of these animals, so being proactive in caring for one's flock is vital.

Manage Stress

Even the best-kept backyard chickens can become stressed. A few things that can create stress are:

Adding to the flock

Bringing in new birds creates changes in the pecking order.

Cleaning out the coop

While it's important to keep the coop clean, doing so disrupts the chickens' environment.

Moving them

Even if moving them from a basic chicken house to a more elaborate coop, moving the birds disrupts the chickens' environment.

Weather changes

Because backyard chickens are generally free-range, they are more likely to be sensitive to weather changes as any sort of environmental change creates stress.

Other birds

Anytime a larger bird flies over, whether it's a crow, hawk or other predatory birds, a chicken's natural instinct kicks in, making them afraid and thus stressing them out.

Other predators

Raccoons, possums, even the neighbor's dog can be perceived as a threat to backyard chickens. Like the other birds, when a predator makes itself known, natural instinct kicks in and causes birds stress.

Be Proactive

Because it's impossible to keep backyard chickens from never being stressed,

it’s important to know how to help them through it, especially as stress makes the birds more susceptible to disease.

To start with, Dr. Stock says it’s important to “Make sure the birds have a clean environment. It’s essential to make sure they have access to freshwater and fresh feed.”

Once a clean environment is in place, a chicken’s immune system is their best defense against disease and death. Using products that contain essential oils is a great way to naturally boost immune systems, providing pivotal protection.

Dr. Stock recommends Ralco’s Strong Animals essential oil products such as First Peep for chicks and Chicken E-lixir and Flock Fixer for fully grown birds. “These stimulate the immune system so you have a good healthy bird. That way it can better fight off the minor challenges that the birds are inevitably going to come up against.”

First Peep is a non-medicated feed supplement that gives new chicks the best possible start to life. It gets baby chicks eating and supports early digestive health which is the foundation for a healthy immune system.

Chicken E-lixir is comparable to a daily multivitamin that humans take to stay healthy. When added to drinking water, this non-medicated water supplement helps support immune systems and promotes digestive health. It also contains calcium that helps support eggshell quality.

Flock Fixer is there for when birds come under stress. Also non-medicated, Flock Fixer provides necessary electrolytes for rehydration, along with pre and probiotics for digestive health. Dr. Stock recommends putting Flock Fixer in the drinking water for 3–5 days when stress events occur.

Follow Directions

Many backyard chicken owners want to raise their flocks in the most natural way. Because of that, the use of antibiotics has fallen out of fashion nationwide and for many essential oils have taken their place.

However, just like any supplement, it’s important to know how to use them properly. Dr. Stock says, “Essential oils can be very volatile, so the first thing to know is that you need to follow mixing instructions.” While Strong Animals products have a high safety margin, Dr. Stock says not all essential oils are like that. “There are some products out there that if too much is used, it can actually be detrimental.”

Dr. Stock says that Strong Animals essential oil products use a patented microfusion process that ensures the oils are well protected. “This is very important because some of the essential oils being used on the open market can actually erode the digestive system if they are used at too high of levels.”

“Strong Animals Chicken Essentials products are carefully designed to contain just the right amount of essential oils to be safe and effective,” said Dr. Stock.

A Fun Hobby
With proper monitoring and proactive care, keeping backyard chickens healthy can be easy. As the trend continues to grow, more and more people will discover that raising chickens is not only a great way to source one's own food but is a fun hobby, too.
About Ralco
Ralco is a third-generation family-owned, multinational company with distribution in more than 40 countries. Ralco is a leading global supplier of natural solutions to maximize nutrient conversion in both plants and animals.
–Ralco

Secretary's Corner

During these strange times, most of us are wondering about our future

24 Strange Predictions For the 21st Century

BY Ellen Gutoskey

Personal airplanes aren't quite reality yet—and sadly, neither are personal space ships! Everyone from chocolate-making companies to some of history's greatest minds (think Ben Franklin and Nikola Tesla) weighed in on what they thought life would be like in the 21st century. Check out what they got right and wrong (mostly wrong!) below, in this piece adapted from an episode of The List Show on YouTube.

1. We Wouldn't Drink Coffee
Inventor Nikola Tesla thought that, by the 21st century, people would no longer be drinking coffee. In a 1935 article in Liberty magazine, Tesla predicted it simply wouldn't be cool to poison our systems with what he considered to be harmful stimulants like caffeine and nicotine. He thought alcohol, on the other hand, would withstand the test of time. Tesla called it an "elixir of life."
2. News Headlines Wouldn't Focus on Crime or Politics
Tesla was way off about coffee. He also misjudged what we'd consider headlining news in the 21st century, predicting that newspapers would, quote, "give a mere 'stick' in the back pages to accounts of crime or political controversies." Tesla believed the front pages would mostly cover scientific hypotheses.
3. Meat Would Be Less Common

In a 1952 issue of Galaxy Magazine, science fiction author Robert A. Heinlein posited that fish and yeast would be our main sources of protein, and that beef would be a luxury. Sci-fi writer Isaac Asimov took it even further. In 1964, he imagined that the 2014 World's Fair would feature an Algae Bar with "mock-turkey" and "pseudosteak," saying, quote, "It won't be bad at all (if you can dig up those premium prices)." So it seems the Impossible Burger wasn't exactly impossible to predict (though it does not contain algae).

4. Fruits and Veggies Would Be Huge

Others thought our food's content would be more or less the same, but that its scale would change dramatically. In 1900, John Elfreth Watkins, Jr. wrote [PDF] in The Ladies' Home Journal that we'd sink our teeth into strawberries, raspberries, and blueberries "as large as apples," and peas and beans would be as big as beets. And that was nothing compared to what George Serviss dreamed up. In a 1956 article from the Independent Press-Telegram's magazine Southland, Serviss imagined a farm from the year 2000 where hydrogen bombs caused the soil to produce 3-foot-long carrots, 4-foot-wide turnips, and basketball-sized tomatoes.

5. Some Letters in the English Language Would Be Eliminated

Watkins, Jr. also believed that we'd completely get rid of the letters C, X, and Q. Instead, spelling would be based on sound alone, so those three letters would presumably be replaced by S's and K's. As bizarre as this may seem, Benjamin Franklin and Noah Webster had advocated for spelling reform in the 18th and 19th centuries. And just six years after Watkins Jr. published his 21st-century predictions, steel magnate Andrew Carnegie created the Simplified Spelling Board to revamp the English language. Despite then-President Theodore Roosevelt's best efforts, English spelling remains largely un-simplified today.

6. We'd Be Able to Make It Rain ...

On January 6, 1910, Iowa's Cedar Rapids Evening Gazette published an article that predicted people would be able to make it rain within the next century—which we actually can kind of do. Through a process called cloud seeding, silver iodide particles are injected into clouds, and water collects around them to form precipitation. Its effectiveness is debated, however, and it's still a far cry from where futurists thought we'd be by the 21st century.

7. ... And Eliminate Hurricanes

In a 1950 article from Popular Mechanics, Valdemar Kaempffert imagined that hurricanes would be a nonissue by the year 2000. Upon spotting one over the ocean, Kaempffert thought we'd ignite a large oil fire across the water, drawing air from the surrounding region and putting an end to the hurricane … somehow. He believed we'd be able to divert storms, putting an end to flight delays. Oh Waldemar, would that it were so simple.

8. We'd Build Machines To Generate Weather

Other fantasies of controlling the weather were even more vague and less scientifically sound. In 1900, a German chocolate company called Theodore Hildebrand unt zoon released a series of illustrated cards with its best 21st-century predictions. One of them depicted a "good weather machine" simply blowing a storm back over the ocean. That same year, The Boston Globe suggested that we'd be able to generate a nice easterly wind whenever it got too hot outside.

9. People Would Live Underground ... And Underwater

Asimov didn't think we'd be able to conquer the elements, but he did think we'd do a better job of avoiding them. He envisioned vast underground cities where advanced light technology could mimic outdoor ambiences, and the earth's surface would be used for agriculture, grazing grounds, and parks. He was a bit off the mark, but an underground park dubbed "the lowline" is supposedly set to debut in New York at some point. Asimov thought we could be well on our way to living underwater by the early 2000s, too, which he felt would especially appeal to those who enjoy water sports.

10. We'd Ride On Fish For Sport

Predictions about 21st-century water sports went far beyond the traditional sailing, surfing, and swimming you're probably picturing. Between 1899 and 1910, French artist Jean-Marc Côté and his contemporaries produced almost 100 highly fanciful illustrations of the year 2000. On one, deep-sea divers ride giant seahorses. Another depicts a whale pulling a bus full of people through the sea. Yet another shows a crowd of onlookers cheering as jockeys race by on the backs of enormous fish. Côté and his fellow artists might be disappointed if they knew we weren't yet spending all our free time underwater, but they'd probably give Aquaman a five-star review.

11. We'd Travel In Unusual Flying Machines

During the early 20th century, many people predicted a future that saw air travel as the primary mode of transportation. This probably wasn't a coincidence, since the earliest planes were taking off around this time. The Wright brothers' famous first flight happened on December 17, 1903. About 10 years later, the first commercial flight carried a whopping one passenger from St. Petersburg, Florida, to Tampa. The flight only covered around 20 miles, but that didn't deter some people from dreaming big about 21st-century aviation.

Côté's early 20th-century French illustrations, for example, were big on air travel. The images show just about every type of aircraft you can possibly imagine. There's one that looks like a hot air balloon basket attached to a helicopter propeller, and another is just a ship attached to two Zeppelin-like aircrafts. There's also a number of individual flying machines for police,

firefighters, and regular citizens, which look like they have actual animal wings attached to them.

12. We'd All Have Personal Airplanes

In 1930, Frederick Edwin Smith—Britain's former Lord Chancellor and a close personal friend of Winston Churchill—published a book called The World in 2030 A.D., in which he imagined that each person would own a small airplane ideal for weekend trips. He wrote that, "Skiing parties in Greenland will be made up in London clubs on Saturday mornings, and translated into action before the same evening."

13. We'd Water the Sahara Desert

Personal planes were one of Smith's more mundane predictions. He also thought we might build a canal to funnel water from the Mediterranean Sea to the Sahara Desert. Because portions of the desert are below sea level, this would create what he called a "new Riviera" with "fertile charm" to rival Florida and the beaches of southern France.

14. We'd Only Have Three Sets of Clothing ...

By 2030, Smith hoped that men would have revolted against what he considered farcical, excessively complicated, and unhygienic clothing. Instead, they'd have only three simple outfits: one for work, one for recreation, and a third for formal occasions.

15. ... Or We'd Mostly Walk Around Naked

Heinlein thought clothing would be on the outs altogether. Covering up would be reserved for strangers and conservative old relatives, and psychiatrists would actually recommend casual nakedness around the house.

16. There Would Be No More State Lines

Heinlein also predicted that by the 1990s, the United States would have passed a constitutional amendment that completely abolished state lines.

17. Most of the Eastern Seaboard Would Be One Mega-city

Asimov thought that Boston, Washington, D.C., and the area in between would have merged into one giant city, with a population of more than 40 million people. That hasn't happened, but the population of the Boston to Washington corridor did clock in around 50 million people in 2010.

18. Moving Sidewalks Would Be Everywhere

You've likely seen moving sidewalks in airports and train stations, but they never became quite as popular as people of the past expected they would. The Columbian Movable Sidewalk Company debuted the first one at the 1893 World's Fair in Chicago. It still holds the Guinness World Record for "longest moving walkway ever." Paris's Exposition Universelle featured another (shorter) moving walkway in 1900. Subsequent attempts to install them in cities like New York, Los Angeles, and Boston all failed, due to maintenance

concerns, weather issues, and also, possibly, the simple fact they're just not very efficient. They have to move slowly so that people can hop on safely—more slowly, in fact, than normal walking speed. And, as Jerry Seinfeld once pointed out, people tend to just stand there like it's a ride.

And if you think it's frustrating to stand behind people on a moving sidewalk at the airport, you might have had a tough time with those early iterations. The version at Chicago's World's Fair had benches to sit on. The one in Paris didn't have seats built in to the moving part of the sidewalk, but as Electrical World said in a 1900 feature, "visitors are beginning to find this out and take their own stools and camp chairs." So these moving sidewalks acted kind of like a train, but slower, and without protection from the elements.

19. We'd Live to Be Really, Really Old

In a 1788 letter to Reverend John Lathrop, Benjamin Franklin shared his theory that within a few centuries, we'd be living as long as the biblical patriarchs [PDF] from the Book of Genesis. Noah, of ark fame, supposedly lived to be 950 years old. And his grandfather, Methuselah, is said to have died when he was 969.

20. There Would Be Nursing Homes On the Moon

As for what a 900-year-old person might look or feel like, Franklin didn't speculate. Heinlein, on the other hand, imagined that nursing homes on the moon could slow signs of aging. Because the moon has just 17 percent of the gravity found on earth, Heinlein thought frail joints would ache less and weak hearts wouldn't have to work so hard. By Heinlein's best estimates, moon-dwellers would be able to reach a cool 120 years old.

21. Houses Would Be Dusted Automatically

Speaking of not having to work so hard, Heinlein also dreamed up a much easier way to clean houses. He called it a "whirlwind," which would automatically whisk dust right out of the house at regular intervals. If you're thinking that might bother you while you're sleeping, eating, or doing anything else, Heinlein had an answer to that, too. The machine would only operate when it didn't detect any masses radiating heat at body temperature.

22. Everything In Homes Would Be Waterproof

Kaempffert thought we'd be able to clean our houses simply by turning the hose on. He predicted that everything from the furniture to the drapes would be manufactured from synthetic fabric or waterproof plastic. After rinsing everything down the water would disappear through a drain, and then a blast of hot air would dry it all off, kind of like a car-wash.

23. We'd Create a Man-Made Star

An Associated Press article from 1950 made the bold claim that we'd have our first man-made star in space by the year 2000. Its surface would reflect sunlight,

and it would orbit the Earth from 400 to 500 miles away. To put that in perspective, the moon maintains an average distance from the Earth of almost 240,000 miles. But the article also describes the star as a spaceship, so maybe the writer just didn't understand what a star actually is. In that case, their predictions weren't quite so outlandish—the International Space Station orbits Earth from around 248 miles away.

24. There Would Be 4-D Movie Theaters

That article also anticipated "four-dimensional," dome-shaped movie theaters with the action unfolding on screens all around you. If a character stepped into the street on the screen in front of you, you'd have to look behind you to see if a car was coming. Virtual reality experiences continue to move in the direction of this type of 360-degree immersion, but the 3D glasses we use in theaters today don't really have the same effect.

Happy Hunting and Be Safe,

Dr. Gary S. Davis
Executive Secretary, SEGB&HPA
www.segamebirds.us