

Marsh on a climb in County Clare, Ireland, 2010.

Out on a Limb

For Meryl Marsh, a business trip to the West Coast requires 90-pound gear bags of harnesses, ropes, and cutting tools. How she's preserving tree DNA for the future, branch by branch.



▶▶ IN CALIFORNIA'S SIERRA NEVADA MOUNTAINS, Meryl Marsh climbs 200 feet into a giant sequoia—a perch she jokingly calls her office. Using a hand-saw, she removes branches from the 3,000-year-old tree and tosses them down to a ground crew. The trimmings will be shipped in coolers to a specialized propagation lab, where they'll be pared down, dipped in a hormonal rooting compound, and placed under automated misters for agricultural cloning.

As director of global operations for Archangel Ancient Tree Archive, Marsh, 31, travels the world in search of the strongest, oldest trees to clone before they disappear because of logging or climate change. "Some have weathered droughts, fire, disease," she says. "We want to preserve that genetic memory for survival." But getting ancient tree cuttings to push out initial growth is tough; a 2 percent success rate is considered a huge victory. "It's like trying to get a grandmother pregnant," Marsh says.

With a background in marketing, she joined the Michigan-based nonprofit as a project manager in 2009 but started training with a world champion

tree climber so she could help with collections, too. "I knew I didn't want to just sit behind a desk," says Marsh, who has made more than 50 climbs to date.

For her first assignment, she conducted an intensive search, consulting forestry experts, geneticists, and knowledgeable locals to find ancient oaks in Ireland. The samples she gathered were successfully cloned in a Netherlands lab, and now some of the offspring will grow on an archive, a living library of trees, in Ireland.

While some saplings are nurtured in protected areas, others are put on environmental cleanup projects: Last spring Marsh spearheaded the planting of 4,000 cloned black willows on a contaminated former industrial site to absorb toxic metals like arsenic.

Looking forward, she and her colleagues will keep pushing large-scale reforestation projects (her organization recently made history for planting cloned sequoias resilient to warming conditions) to offset climate change and the destructive impact of carbon dioxide on the environment. "This work is about tomorrow," she says. "Hopefully 200 years from now, someone will be glad we took on this mission." —JESSICA STOCKTON CLANCY



SIZE MATTERS

As Marsh scouts for trees, "age can be a guessing game," she says; it helps if she can first figure out if a tree is a champion (among the largest of its species). "While size isn't always correlated to age, it's one of our best indicators," Marsh explains. She measures height, girth, and crown cover, then calculates a point value to see how the tree stacks up.

COPY THAT

A sampling of the trees Marsh has cloned.



GIANT SEQUOIA



BLACK WILLOW

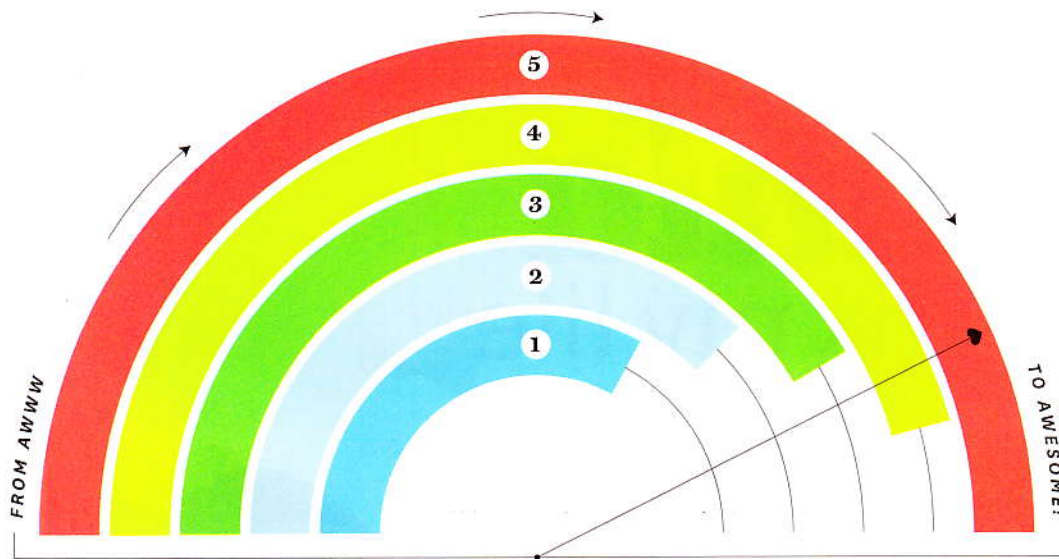


REDWOOD

THE GRATITUDE METER

5

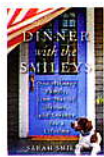
Things We Can't Stop Smiling About This Month



1

STUDENT SHOUT-OUT

Forget about giving your favorite teacher an apple to show your thanks. On May 7 (National Teacher Day), go to thanksfor-teaching.us and post stories about your most excellent educators for the whole world to see.



2

GUESS WHO'S COMING TO DINNER?

When Navy pilot Dustin Smiley deployed to Africa in 2011, his wife and sons invited a revolving door of special guests (musicians, pro athletes, comedians) to fill his seat at the dinner table. Read about the culinary callers in the family's uplifting book, *Dinner with the Smileys*.



3

STOP YOUR ENGINES

Bike sharing takes the country by storm this spring with major initiatives starting in Salt Lake City, Fort Worth, and New York City, where a fleet of 10,000 bikes will be stationed throughout the city. More pay-to-ride programs to come in Los Angeles and San Francisco this year.



4

HEALTHY DELIVERY

No time to hit the vitamin aisle or the gym? Sign up for Klutchclub, and a handpicked box of good-for-you snacks, supplements, and fitness products will be delivered to your doorstep each month. Try it out for a full year, and each box costs as little as \$16.



5

JAY-Z MEETS JAY GATSBY

If Leonardo's starring role in this month's big-screen adaptation of F. Scott Fitzgerald's classic novel isn't exciting enough, consider this: Jay-Z collaborated with Baz Luhrmann on the soundtrack. Buying your opening-night ticket now? So are we! —EMMA HAAK



O LIBS

Stevie Nicks

The singer-songwriter—who's now touring with a reunited Fleetwood Mac—fills in a few blanks.

I can't live without...

my 14-year-old Chinese crested-Yorkie, Sulamith. She travels with me almost everywhere, and she's even got mini Stevie Nicks flaming capes, black chiffon dresses, and white jackets that my wardrobe mistress made for her.

My ideal Saturday night is...

curling up on my pink couch in my Santa Monica condo to watch a *Law & Order* marathon. It can be any of the iterations: *Criminal Intent*, *SVU*... whichever one is on makes me think I could be a detective.

My backup career would be...

running a hotel. I enjoy taking care of people and making them feel comfortable. When my friends come to visit, I want them to walk into their room and know that the cashmere blanket or perfect pillow was picked specifically for them by me. I could totally open a hotel and spend my days putting beauty and care into each room.

The one thing I do every day is...

write in my journal. Someday, when I'm no longer here, I want my nieces and goddaughters to sit on the floor with 30 leather-bound books and read about my life—not from the Internet, or a biography, but from me. —As told to Arianna Davis

YOU DO WHAT?!

Hopped Up

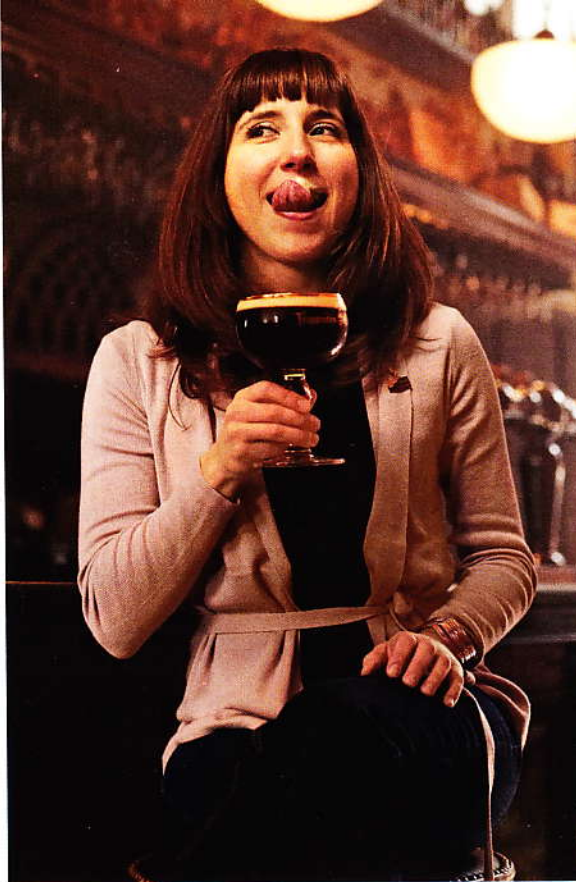
Bucking the typical beer-buff profile, 29-year-old Nicole Erny is the first woman and youngest person ever to achieve the title of Master Cicerone, certified beer expert. Cheers to that.

ON THE GRUELING, 14-HOUR MASTER CICERONE CERTIFICATION EXAM

"It's intense—two full days. Ten hours of writing. And two kinds of tastings: In one you have to detect the flaw of the beer down to the compound name. In another you have to describe the flavor profile and identify the style of beer, which is often obscure. It's very tricky." (Of the 11 candidates to attempt the exam in 2011, only Erny passed.)

ON CHOOSING PALE ALE OVER PINOT

Erny grew up near California wine country but naturally gravitated toward beer. "There's too much posturing in the wine world; I don't have the personality for it."



ON THE STATE OF HER LIVER

"Most people think all I do is drink beer all day, but I probably drink less now than I ever have." Erny currently oversees the planning of the Certified (second-level) Cicerone exam and travels the country training beer aficionados.

ON WORKING WITH MOSTLY BEARDED, BIG-BELLIED GUYS

"Being quite a bit younger than most, and a woman, I've certainly run into walls within the beer community. I was partially fueled by my own defensiveness to get the certification, to earn legitimacy among my peers. But sometimes there's actually reverse sexism: 'Oh, you're a woman? You must have super tasting powers.'" —LAUREN MURROW

BREW MASTERY

Become more suds-savvy with these insider tips.

1

Grab a growler. Many beer stores and bars offer half-gallon jugs to sample beers that aren't available bottled.

2

Reach for a cold one. Heat exacerbates oxidation, the main flavor-corruptor of bottled beer. (The stale stuff can taste papery.)

3

Give India Pale Ales a chance. "Less bitter ones are becoming popular, with flavors like citrus fruits or strawberry," Erny says.

BIG-SCREEN MOMS WE'LL NEVER FORGET

Here, just in time for Mother's Day, a few matriarchs worth buttering popcorn for. —LISA KOGAN



THE MOVIE *Edward Scissorhands* (1990)

THE MOM **DIANNE WIEST** as Peg Boggs

THE PLOT World's sweetest Avon Lady opens heart and home to the ultimate stray. (Could be argued that it doesn't exactly require a whole lot of goodness to take in Johnny Depp.)



THE MOVIE *About a Boy* (2002)

THE MOM **TONI COLLETTE** as Fiona Brewer

THE PLOT Pale, limp, crunchy-granola suicidal mother is in way over her really bad haircut. On the plus side, loves nerdy son fiercely enough to get some help in the form of Hugh Grant.



THE MOVIE *The Incredibles* (2004)

THE MOM **HOLLY HUNTER** as Helen Parr, a.k.a. Elastigirl

THE PLOT Lots of multitasking moms complain of being stretched too thin, but this one has the power to make like an enormous rubber band, hold the entire clan together, and, oh, yeah, save the world.



THE MOVIE *Precious* (2009)

THE MOM **MO'NIQUE** as Mary

THE PLOT Mommie Dearest pimps out her teen to the kid's own father. After 110 soul-crushing minutes, you'll apologize for ever whining about being forced to wear coat over Halloween costume.



THE MOVIE *The Fighter* (2010)

THE MOM **MELISSA LEO** as Alice Ward

THE PLOT Domineering, animal-print-loving, bleached-blond mother pushes son into boxing ring to be beaten to a bloody pulp; miraculously steals our hearts by movie's end.