



ALL  
CATEGORIES

RELATIONSHIPS

DADS

ADVICE

ETHICS

PREMIUM

DATING  
PROGRAMS

[Home](#) / [Featured Content](#) / Opinion: Carbon Capture Scale Up Brings New Problems to the Midwest

# Opinion: Carbon Capture Scale Up Brings New Problems to the Midwest

**Sequestration subsidies are a boon for et  
relies on pose risks.**

March 10, 2025 by [Undark](#) [Leave a Comment](#)

## We value your privacy

This website or its third-party tools process personal data. You can opt out of the sale of your personal information by clicking on the "Do Not Sell or Share My Personal Information" link.

[Do Not Sell or Share My Personal Information](#)



By [Christian Elliott](#)

Growing up in Iowa means growing up with corn. To an outsider, the scale can be overwhelming. It's all you see for miles. For me, though, it was just normal: The fields around my family farm were my childhood playground. But one thing struck me as off: Nothing ate the corn, as we had no cows, pigs, or chickens. Each year, the harvest disappeared down the highway on semi-trucks.

And it's where the corn ended up that's problem: likely, in your car's gas tank. N corn ethanol is fueling the rapidly expanding geologic carbon storage industry, which bringing a new set of problems to the M

In college, studying environmental science learned I grew up in the shadow of two

### **We value your privacy**

This website or its third-party tools process personal data. You can opt out of the sale of your personal information by clicking on the "Do Not Sell or Share My Personal Information" link.

[Do Not Sell or Share My Personal Information](#)

[THE SITE](#)

[COURSES](#)

[ABOUT US](#)

[PREMIUM](#)

[SUBMIT](#)

[ADVERTISE WITH US](#)

[CONTACT THE GOOD MEN PROJECT](#)

[TERMS OF SERVICE](#)

[PRIVACY POLICY](#)

[BUY THE BOOK](#)

[KEEP IN TOUCH](#)

[FACEBOOK](#)

[TWITTER](#)

[PINTEREST](#)

[INSTAGRAM](#)

[YOUTUBE](#)

[SOUNDCLOUD](#)

year. The side effects include carbon emissions, topsoil depletion, and fertilizer and pesticide runoff into the former meandering stream, which has killed the native American river muskrat and the American river muskrat. All this pollution may contribute to the decline of the American river muskrat.

I live in central Illinois now, a 45-minute drive from the end of the road. Daniels Midland (ADM) and the end of the road. You live, you're likely filling your car with gasoline, which mandated ethanol in gasoline as a result of the Renewable Fuel Standard, which never materialized, is now deeply inscribed in the landscape.

### **We value your privacy**

This website or its third-party tools process personal data. You can opt out of the sale of your personal information by clicking on the "Do Not Sell or Share My Personal Information" link.

[Do Not Sell or Share My Personal Information](#)

Don't like ads? [Become a supporter](#) and enjoy The Good Men Project ad free

Ethanol wasn't meant to last. But as the automotive industry embraces electrification, ethanol faces an existential crisis.

The Biden administration threw the ethanol industry a lifeline in the Inflation Reduction Act, which established an \$85 per metric ton subsidy for geologic carbon sequestration. The carbon dioxide that ethanol plants produce is pretty clean — easy (and now more profitable than ever) to capture and sequester deep underground. Central Illinois, serendipitously, has some of the most favorable geology in the country for carbon sequestration, in the form of a deep saline reservoir of porous rock more than a mile below the cornfields called the Mt. Simon Sandstone. And ADM, which is one of the largest agricultural emitters of CO<sub>2</sub>, is home to the world's largest carbon sequestration well, built more than a decade ago.

I've followed the corn across state lines. For 10 years, ADM says its project has sequestered 1.5 million metric tons of CO<sub>2</sub>. Other companies have submitted plans for about a dozen more. The Environmental Protection Agency for approval, which could mean scaling up sequestration by 100 times.

### We value your privacy

This website or its third-party tools process personal data. You can opt out of the sale of your personal information by clicking on the "Do Not Sell or Share My Personal Information" link.

[Do Not Sell or Share My Personal Information](#)



It's an equation industry has managed to solve perfectly — a source of emissions and a way to sequester them, both sides propped up by lucrative subsidies and tied together by a pipeline of high-pressure liquified carbon dioxide.

But there's a problem at the ADM plant, held up as an example of U.S. carbon sequestration research — it leaks. In 2024, ADM discovered 8,000 metric tons of CO<sub>2</sub> and saline brine had migrated into an unauthorized zone. The carbon dioxide likely corroded the 13 Chrome steel pipe, thought safe for sequestration wells. ADM reported the leak to the EPA. But most locals didn't learn of the issue until later in the year, when E&E News broke the story. In September 2024, a second monitoring well leaked, and ADM temporarily stopped injecting CO<sub>2</sub>. In response to a request for comment, ADM directed Undark to a [statement](#) on its website.

*"As the automotive industry embraces electrification  
ethanol face*

David Horn, a biology professor at Millil said he was wasn't informed of the leak supply. The city had signed a new easem the company's well, located in the heart correct for the City Council and for the

### We value your privacy

This website or its third-party tools process personal data. You can opt out of the sale of your personal information by clicking on the "Do Not Sell or Share My Personal Information" link.

[Do Not Sell or Share My Personal Information](#)

Residents vented their concern and frustration through the [Protect the Mahomet Aquifer](#) campaign, led by the Prairie Rivers Network, Eco-Justice Collaborative, and Illinois People's Action, all local environmental groups. The Mahomet supplies drinking water for much of central Illinois. It also happens to overlies the most favorable geology for sequestration.

As carbon sequestration scales up, four proposed projects would drill through the aquifer to Mt. Simon Sandstone. Some [research shows](#) that carbon dioxide leaks could contaminate aquifers by leaching heavy metals into water, or introduce brine from deeper saline aquifers. Environmentalists also worry about bigger unknowns – corrosion in wells, cracks in caprock layers from seismic activity, or unmapped abandoned oil wells could provide irreparable paths for the CO2 to return to the surface. And companies are incentivized by subsidies to put CO2 underground, not necessarily to keep it there, said Andrew Rehn, the Prairie Rivers Network's climate policy director.

Don't like ac }  
Good

Along with the Eco-Justice Collaborative that would ban sequestration overlying, or aquifers that serve as the only source cycle, their activism helped add safeguards to the SAFE CCS Act. Their organizations also oppose pipelines and carbon sequestration.

### We value your privacy

This website or its third-party tools process personal data. You can opt out of the sale of your personal information by clicking on the "Do Not Sell or Share My Personal Information" link.

[Do Not Sell or Share My Personal Information](#)

ADM and the fluid migration has had “no impact” on drinking water. “What happens at 5,000 feet stays at 5,000 feet” said Susan D. Hovorka, a senior research scientist at the University of Texas at Austin’s Bureau of Economic Geology who’s studied carbon sequestration since 1998. Class VI wells are the latest in an EPA program that’s regulated the disposal of waste products – from radioactive chemicals to wastewater from hydraulic fracturing – underground to protect water for half a century. The technology is as routine and safe as plumbing, Hovorka said, and any sequestration well through an aquifer would be triple walled. Plus, a CO2 leak in an aquifer would just result in “soda water,” she said.

“This isn’t a ‘Well, we have to stop and rethink everything’ moment,” said Briana Schmidt, a geologist at Lawrence Livermore National Laboratory, part of a consortium of Department of Energy labs studying geologic carbon storage risks. But, she added, there is significant effort to incorporate the lessons from Decatur “as fast as possible into the new permits.” Enforcement of rules, she noted, depends on an adequately staffed EPA.

But even with regulations in place, issues can arise. Some central Illinois residents fought a yearslong court battle after a natural gas leak that affected the Mahomet, and infamously, a carbon dioxide pipeline ruptured in Satartia, Mississippi, sending residents to the hospital. But Locke, Hovorka, and other CCS researchers say some level of risk is unavoidable.

That all may be true. But if sequestration keeps moving forward in central Illinois, ethanol will remain profitable – an agricultural system that threatens water quality and quantity by tapping aquifers like the Mahomet for crop irrigation and ethanol production and polluting streams and rivers. And if political priorities change, carbon captured from ethanol plants could just as easily be pumped along pipelines for enhanced oil recovery, as it has been historically, warned Secchi. For activists, opposition to carbon sequestration and environmentalists, Indigenous groups, fa

## We value your privacy

This website or its third-party tools process personal data. You can opt out of the sale of your personal information by clicking on the "Do Not Sell or Share My Personal Information" link.

[Do Not Sell or Share My Personal Information](#)

Don't like ads? [Become a supporter](#) and enjoy The  
Good Men Project ad free

It's "proof that change can happen and new conversations can occur, and new relationships can be formed to promote alternative visions for the future," said Secchi.

"At the local level," she added, "I haven't seen this level of organizing and protest." Water is a powerful motivator.

The leak is an immediate crisis that caused a strong reaction. But perhaps the most important thing it can do is draw attention to the slow disaster unfolding all around us. Once your eyes are opened, it's hard to look out across the fields surrounding my childhood home state and see anything else.

---

*Christian Elliott is a science and environ*

This article was originally published on <sup>1</sup>

---

*Previously Published on undark.org*

### **We value your privacy**

This website or its third-party tools process personal data. You can opt out of the sale of your personal information by clicking on the "Do Not Sell or Share My Personal Information" link.

Do Not Sell or Share My Personal Information





**Turn Your Dating Life into a WOW! with our new classes and live coaching.**

**Click here for more info or to buy with special launch pricing!**

\*\*\*

**On Substack? Follow us there** for more great dating and relationships content.

---

**Join The Good Men Project as a Premium Member today.**

All Premium Members get to view The Good Men Project with NO ADS. [A complete list of benefits is here.](#)

—  
Photo credit: [iStock](#)

---

## AROUND THE WEB

### We value your privacy

This website or its third-party tools process personal data. You can opt out of the sale of your personal information by clicking on the "Do Not Sell or Share My Personal Information" link.

[Do Not Sell or Share My Personal Information](#)

**Recipe!**

Lazy Way to Lose Weight Fast

Health-Review24

New Medical Breakthroughs

**Here's The Estimated Cost of a 1-day Walk-in Shower Upgrade**

HomeBuddy

**These Symptoms Indicate Parasites Inside Your Body! Banish Them! Watch How!**

ParasiteRelief

**Forget Vitamin B, Do This if You Have Neuropathy & Nerve Pain**

Wellness Gaze Nuero

**If You Discover Papillomas on Your Body, Do This Urgently**

ParasiteRelief

**Neurologist: 97% of People With Neuropathy Don't Know This Crucial Thing**

NeuropathyGuide

**Wrap a Wet Paper Towel Around Your Drink, Here's Why**

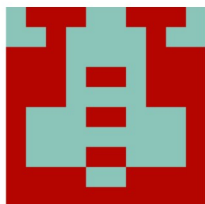
LifeHacksBay

Filed Under: [Environment](#), [Featured Conten](#)  
Tagged With: [agricultural](#), [Capture](#), [carbon](#), [Technology](#)

**We value your privacy**

This website or its third-party tools process personal data. You can opt out of the sale of your personal information by clicking on the "Do Not Sell or Share My Personal Information" link.

[Do Not Sell or Share My Personal Information](#)



## About Undark

*Undark is a non-profit, editorially independent digital magazine exploring the intersection of science and society. It is published with generous funding from the John S. and James L. Knight Foundation, through its Knight Science Journalism Fellowship Program at MIT.*

*The name Undark arises from a murky, century-old mingling of science and commerce — one that resulted in a radium-based industrial and consumer product, called Undark, that was both awe-inspiring and, as scientists would only later prove, toxic and deadly. We appropriate the name as a signal to readers that our magazine will explore science not just as a “gee-whiz” phenomenon, but as a frequently wondrous, sometimes contentious, and occasionally troubling byproduct of human culture.*

*As such, the intersection of science and society — the place where science is articulated in our politics and our economics; or where it is made potent and real in our everyday lives — is a fundamental part of our mission at Undark.*



*Be the First to Comment!*

**B** **I** **U**          

☐ **Notify me of followup comments via e-mail**

☒ **Subscribe** ▼



This site uses Akismet to reduce spam. [L](#)

## We value your privacy

This website or its third-party tools process personal data. You can opt out of the sale of your personal information by clicking on the "Do Not Sell or Share My Personal Information" link.

[Do Not Sell or Share My Personal Information](#)

Don't like ads? [Become a supporter](#) and enjoy The Good Men Project ad free

## TRENDING POSTS



**I Just Got Back From Europe. They All Know That America's a Mess and That He's Nuts.**  
[Ethics & Values](#)



**Lies, Big Lies, and the BIG LIE: An Analysis of Intensifying Collapse**  
[Ethics & Values](#)



**Love Lives Where the Theories End**  
[Sex & Relationships](#)



**The Stories We Tell (And Why)**  
[Advice & Confessions](#)



**Exhausted by the News? Here's How to Stay  
Overwhelmed – or Misled by Media**  
[Ethics & Values](#)



**The True Motives Behind Right-Wing  
Politics**  
[Ethics & Values](#)

### We value your privacy

This website or its third-party tools process personal data. You can opt out of the sale of your personal information by clicking on the "Do Not Sell or Share My Personal Information" link.

[Do Not Sell or Share My Personal Information](#)





### The Man Who Seeks Himself: A Journey to Self-Awareness

[Ethics & Values](#)



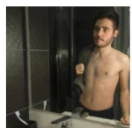
### Bill Maher's Missed Opportunity

[Ethics & Values](#)



### My Dad Taught Me to Slow Down and Appreciate the Journey. Too Bad It Took Me so Long to Listen

[Families](#)



### Guys Have Body Image Issues Too—We Just Don't Talk About It

[Health & Wellness](#)



### It's So Overwhelming

[Ethics & Values](#)

## SUBSCRIBE TO EMAIL

Join The Good Men Project conversation and get updates by email.

**Subscribe to our mailing list:**

**First Name**

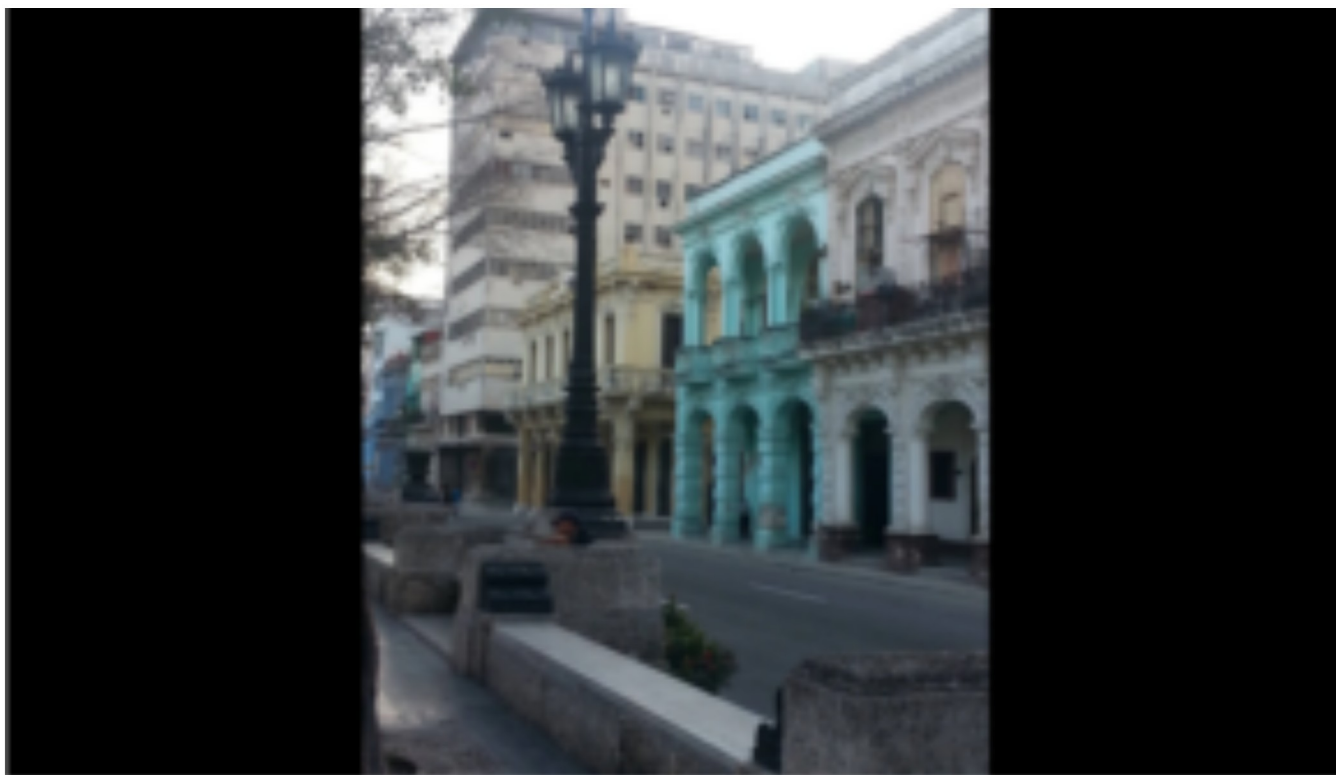
**Last Name**

## FEATURED CONTENT

### We value your privacy

This website or its third-party tools process personal data. You can opt out of the sale of your personal information by clicking on the "Do Not Sell or Share My Personal Information" link.

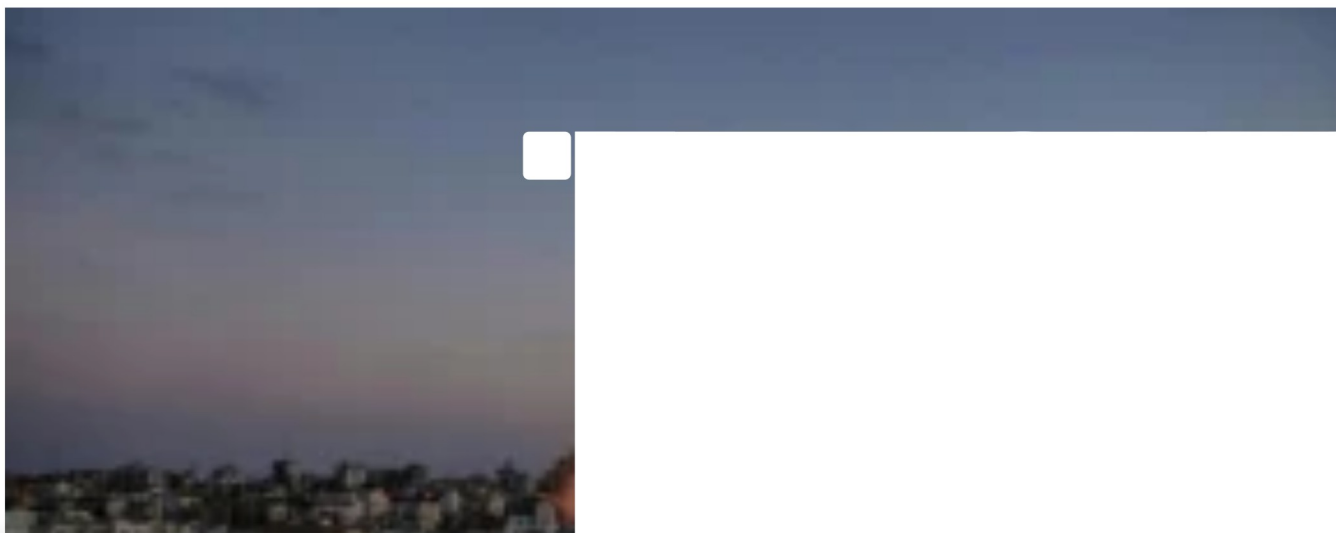
[Do Not Sell or Share My Personal Information](#)



## Making Moroccan Dreams Come True

How a solo trip to Havana brought on a lifetime of travel.

11 minutes ago



### We value your privacy

This website or its third-party tools process personal data. You can opt out of the sale of your personal information by clicking on the "Do Not Sell or Share My Personal Information" link.

[Do Not Sell or Share My Personal Information](#)

## Opposing Israel's War Machine Doesn't Make You Antisemitic

We need to view the entire Israel/Gaza situation through 'new eyes'

41 minutes ago



## I Admit: Ghosting Is a Power Move (Even If It's Messed Up)

That's precisely why ghosting works.

1 hour ago

### We value your privacy

This website or its third-party tools process personal data. You can opt out of the sale of your personal information by clicking on the "Do Not Sell or Share My Personal Information" link.

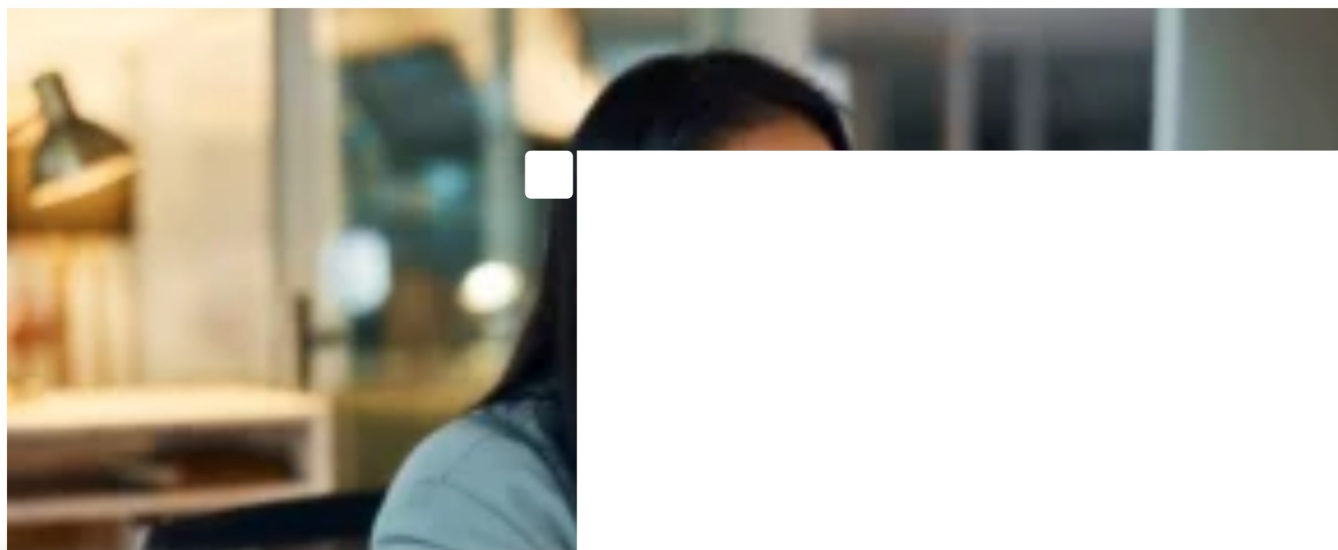
[Do Not Sell or Share My Personal Information](#)



## Is This What I Voted For?

A biting reflection on political silence as freedoms and human rights crumble one group at a time.

1 hour ago



### We value your privacy

This website or its third-party tools process personal data. You can opt out of the sale of your personal information by clicking on the "Do Not Sell or Share My Personal Information" link.

[Do Not Sell or Share My Personal Information](#)



## 14 Wealth Gaps Millennials Say Boomers Created

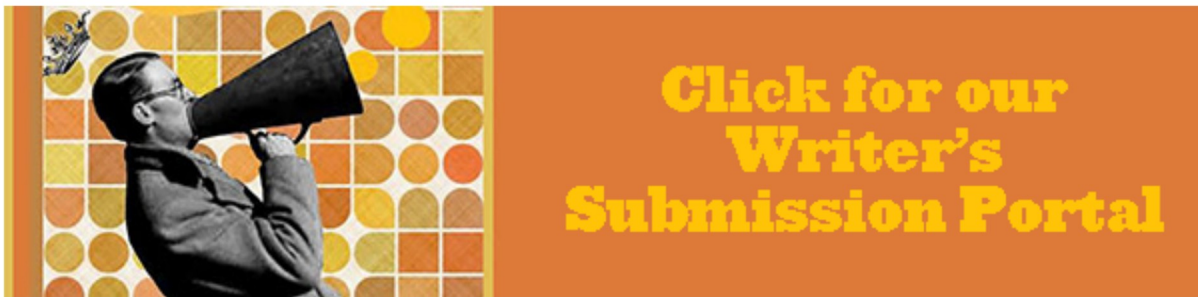
The baby boomer generation, born between 1946 and 1964, witnessed and contributed to many significant societal changes.

2 hours ago

- [Is It Autism, a Learning Disability, or Both?](#)
- [Looking for a Job After College? 5 Ways to Get a Good Job](#)

[More Featured Content](#)

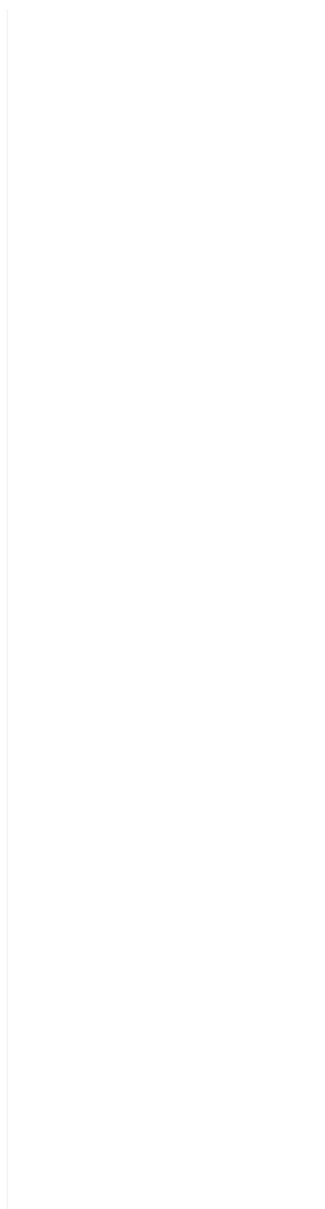
## SUBMIT A POST!





### We value your privacy

This website or its third-party tools process personal data. You can opt out of the sale of your personal information by clicking on the "Do Not Sell or Share My Personal Information" link.

[Do Not Sell or Share My Personal Information](#)



Don't like ads?  

## BECOME A PREMIUM MEMBER



### We value your privacy

This website or its third-party tools process personal data. You can opt out of the sale of your personal information by clicking on the "Do Not Sell or Share My Personal Information" link.

[Do Not Sell or Share My Personal Information](#)

*The following links are paid or sponsored.*

--

[Buy from China](#)



e-residence



DITTO

Hi. We're Ditto Transcripts, your next t

--

Sex, Drugs, and Rock 'n' Rock: visit [Amc](#)  
favorite celebs!

- Find [attorneys](#) near me. Lawyers and

### We value your privacy

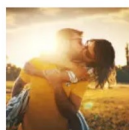
This website or its third-party tools process personal data. You can opt out of the sale of your personal information by clicking on the "Do Not Sell or Share My Personal Information" link.

[Do Not Sell or Share My Personal Information](#)

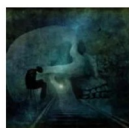
# ALL TIME POPULAR



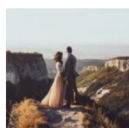
**I Won't Tell My 4-Year-Old Son to 'Man Up.' Not Now. Not Ever.**  
[Raising Boys](#)



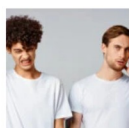
**7 Things Men Want in a Relationship**  
[Editors' Picks](#)



**50 Sufferers Describe Depression for People Who've Never Been Depressed**  
[Editors' Picks](#)



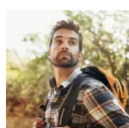
**Relationships Aren't Easy, but They're Worth It**  
[Sex & Relationships](#)



**The Two Emotions Men Are 'Allowed' to Feel — And Why That's a Problem**  
[Ethics & Values](#)



**To the Other Dad on the Playground the Day My Son Wore a Pink Dress**  
[Families](#)



**6 Ways to Develop Character and Become More Attractive**  
[Sex & Relationships](#)



**The Defining 3 Loves in Your Lifetime**  
[Sex & Relationships](#)



**The First Myth of Patriarchy** 1  
[Editors' Picks](#)



**It's Just Who I Am Now**  
[Ethics & Values](#)



**How Can Lonely Men Find Belonging?**  
[Advice & Confessions](#)

## We value your privacy

This website or its third-party tools process personal data. You can opt out of the sale of your personal information by clicking on the "Do Not Sell or Share My Personal Information" link.

[Do Not Sell or Share My Personal Information](#)

\*\*\*

## CONNECT WITH US

## THE GOOD MEN PROJECT VIDEO CHANNEL

## SEARCH GOOGLE

Copyright © 2025 GoodMenProject.com · Powered by [WordPress](#) &  · [Privacy Policy](#) · [Log in](#) · [Do Not Sell My Personal Information](#)

### We value your privacy

This website or its third-party tools process personal data. You can opt out of the sale of your personal information by clicking on the "Do Not Sell or Share My Personal Information" link.

[Do Not Sell or Share My Personal Information](#)