

Farms Under Threat: State Of America's Farmland

JULIA FREEDGOOD, APRIL 4, 2019

What is American Farmland Trust?

Nonprofit membership organization founded in 1980

Working to Save the Land that Sustains us by:

- Protecting farm and ranch land
- Promoting sound farming practices
 Keeping farmers on the land

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The U.S. is blessed with >10% of the world's most arable soils

By 2040:

- 9 billion people are predicted to inhabit the earth
- 380 million in the U.S.

Will we have enough farmland to meet our basic needs?



American Farmland is Threatened by Chronic Trends

- 40% of ag land is owned by seniors aged 65 and older → 30-yer decline of young and beginning farmers
- Weakened farm viability → consolidation → low commodity prices ...
- Climate change → drought, fires, floods, mudslides …
- Urbanization <u>and low density</u> rural development





What is Farms Under Threat?

AFT has undertaken a multi year, multi-faceted national initiative to:

- Analyze the conversion of farm and ranch lands
- Link findings to policies and solutions
- Predict impacts of future threats









How are we doing it?

- Multi-layered spatial analyses/maps
- Policy analyses/scorecards
- Extension to inform policy and planning
- Communications to mobilize support





Mapping Model

- Maps to meet NRCS-NRI county estimates
- Assigns cover types by soils, slope, NLCD and CDL (for cropland)
- Assumes highest best use; checks against NRI point data for accuracy









Underlying data layers = 500 GB: That's like 1.7 million books!

Land Cover and Use across the U.S.





Farmers and Ranchers Have a Big Impact on the Environment They manage >1 billion acres

55% of the contiguous U.S.

 Agricultural lands, including woodlands associated with farms = 47%

 Federal grazing lands = 8%

<u>Quality</u> as well as <u>Quantity</u>

- What makes farmland ideally suited for food and crop production?
 - Productivity: Supports high yields, few limitations
 - Versatility: Supports a wide range of crops
 - Resiliency: Supports production over time



Productive, Versatile and Resilient Land Continuum



Less than 1/3 of our Farmland is Well Suited for Food and Crop Production



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U.S. AGRICULTURE RELIES ON HIGH-QUALITY FARMLAND



Only 17 percent of the land in the continental U.S. is agricultural land with the productivity, versatility and resiliency (PVR) to produce a wide variety of crops with minimal environmental limitations.

Retrospective Analysis

We mapped spatial patterns of ag lands to show the extent of urbanization and fragmentation



<u>Urban:</u> "Built-up" or developed areas of high-density residential, commercial, industrial and transportation use using National Land Cover Dataset

Low density residential:

Housing density related to distribution of median farm sizes within each county, including development on >10 acres, using Census of Ag and U.S. Census housing density data



We Developed 31m Farmland Acres from 1992 - 2012





That's like losing a state the size of New York or all of the farmland in lowa

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62% of All Land Developed was Ag Land

Land cover/use	Urban Development			Low Density Residential			Total Developed			
	% of ag land	Acres lost	% by land type	% of ag land type converted	Acres lost	% by land type	% of ag land type converted	Acres lost	% by Iand type	% of ag land type converted
Cropland	34.3%	7,408	28.9%	41%	4,385	18.5%	34.5%	11,793	23.9%	38.4%
Pastureland	11.9%	4,662	18.2%	25.9%	4,379	18.5%	34.5%	9,041	18.3%	29.4%
Rangeland	44.9%	4,285	16.7%	23.8%	1,408	5.9%	11.1%	5,693	11.5%	18.5%
Woodland	8.8%	1,674	6.5%	9.3%	2,527	10.6%	19.9%	4,201	8.5%	13.7%
Total on ag land		18,029	70.4%		12,698	53.5%		30,727	62.3%	
Forestland		5,107	19.9%		9,739	41%		14,846	30.1%	
Other		2,463	9.6%		1,297	5.5%		3,761	7.6%	
Total		25,600			23,735			49,335		

Conversion by land cover/use between 1992 and 2012 in thousands of acres



Most Development Occurred on Crop and Pasture Lands





Low Density Development Is Devouring Rural Communities

Rural America encompasses 72% of our land area

Houses 14% of population

Yet 41% of ag land acres converted went to low density residential development



What's Up Next for Farms Under Threat?

- State of the States: within state analyses, reports, and state policy scorecards
- Projective analyses: housing density and climate change models
- Enhanced protected farmland layer
- Demographic and infrastructure analyses



Every State is losing its Important Farmland



States Still Developed Their Important Farmland Despite Smarter Growth and the Great Recession





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Very Preliminary Results: 2002-2012

State Rank	Ag Iand acres Iost	% ag land acres lost	Acres nat. sig. ag land lost	% nat. sig.ag land lost	acres state sig. ag land lost	% state sig. ag land lost
1	ТХ	RI	NC	NC	ТХ	NC
2	NC	NC	WI	DE	NC	DE
3	TN	DE	PA	RI	TN	NJ
4	GA	TN	NY	NJ	WI	VA
5	MO	NJ	TX	PA	CA	<mark>PA</mark>
6	WI	MA	OH	VA	МО	TN
7	ОН	MD	IL	WV	VA	RI
8	VA	СТ	MI	MD	PA	СТ
9	PA	VA	GA	СТ	NY	MA
10	NY	GA	VA	MA	GA	WV
11	CA	<mark>PA</mark>	MO	NY	AL	NY
12	MI	SC	IN	AL	KY	MD





How States Have Responded

STATE POLICY SCORECARD





What is the State Policy Scorecard?

 Analysis of policies & programs that:

- Protect farmland
- Support agricultural viability
- Includes eight approaches
 Goal is to inspire policy action





Programs that Protect Farmland

- Purchase of Agricultural
 Conservation
 Easements
- Planning & Land
 Use Policies
- Agricultural District Laws





Programs that Support Ag Viability

Use-Value
 Assessment

- Right-to-Farm
- Access to Land:
 - FarmLink
 - State Leasing
- Farm Viability



Process to Date





Thoughts?

Questions?

Saving the Land that Sustains Us



American Farmland Trust

www.farmland.org

www.farmlandinfo.org



Most Farmers Struggle to Keep Farming

Only 20% make a profit higher than the poverty line for a family of four



Extreme weather disruptions are increasing



By mid-century, negative impacts of climate change are projected to significantly affect food production



Farmers are graying faster than the general population





The proportion of senior principal operators increased **86%** from 1982 to 2012!





While the ranks of beginning farmers continues to fall

↓ 20% just from 2007 to 2012

Seniors age 65+ own > 40% of American farmland