

## U.S. Adoption Patterns, 1997-2001

U.S. farmers and ranchers added another million acres of farmland managed under certified organic systems between 1997 and 2001, bringing the total to 2.3 million acres in 2001 (table 2). Farmers and ranchers certified 1.3 million acres of cropland and 1 million acres of pasture and rangeland in 2001. Every State but Mississippi and Delaware had some certified cropland, and nearly nine-tenths had certified pasture. Organic animal production systems were certified in 37 States, up from 23 States in 1997. Certified organic cropland more than doubled in 12 States between 1997 and 2001, and certified organic pasture more than doubled in nearly two dozen States.

Certified organic cropland was up 53 percent between 1997 and 2001, increasing from 850,173 acres to 1,304,766 acres, and was up 7 percent from 2000 to 2001 (table 2). California was the leading State in certified organic cropland acreage in 2001 with nearly 150,000 acres, mostly used for fruit and vegetable production (table 3). North Dakota followed closely with nearly 145,000 acres, mostly used for wheat, soybeans, and other field crops. The other top States in certified organic cropland—Minnesota, Wisconsin, Iowa, Montana, Colorado, Idaho, South Dakota, and Michigan—also dominate in field crops (fig. 1).

Certified organic pasture and rangeland increased 109 percent between 1997 and 2001, and increased 28 percent from 2000 to 2001, reflecting the rapid expansion in organic livestock and poultry (table 2). Three States each had over 100,000 acres of pasture and rangeland in 2001—Colorado (514,000 acres), Texas (221,000 acres), and Montana (137,000 acres). Forty other States also had certified pasture and rangeland in 2001, most with under 20,000 acres.

The number of certified organic beef cows, milk cows, hogs, pigs, sheep, and lambs was about 71,000 in 2001, up nearly three-fold since 1997, and up 27 percent from 2000 to 2001 (table 2). Dairy has been one of the fastest growing segments of the organic foods industry, and milk cows accounted for over half of these certified animals. Poultry animals raised under certified organic management showed even higher levels of growth during this period. Certified organic layer hens, broilers, and other poultry increased over five-fold between 1997 and 2001, and jumped 59 percent from 2000 to 2001 (table 2).

USDA removed restrictions on organic labeling for broilers in 1999, and broilers showed the biggest jump during the study period, increasing from 38,000 birds in 1997 to almost 2 million birds in 2000 and over 3 million in 2001.

**Table 2—U.S. certified organic farmland acreage, livestock numbers, and farm operations, 1992-2001**

Item <sup>1</sup>	1992	1993	1994	1995	1996	1997	2000	2001	Change		
									1992-97	1997-01	2000-01
						<i>Acres</i>					
<b>U.S. certified farmland:</b>											
Total	935,450	955,650	991,453	917,894	--	1,346,558	2,029,073	2,343,924	44	74	16
Pasture/rangeland	532,050	490,850	434,703	279,394	--	496,385	810,167	1,039,505	-7	109	28
Cropland	403,400	464,800	556,750	638,500	--	850,173	1,218,905	1,304,766	111	53	7
						<i>Number</i>					
<b>U.S. certified animals:</b>											
<b>Livestock</b>											
Beef cows	6,796	9,222	3,300	--	--	4,429	13,829	15,197	-35	243	10
Milk cows	2,265	2,846	6,100	--	--	12,897	38,196	48,677	469	277	27
Hogs & pigs	1,365	1,499	2,100	--	--	482	1,724	3,135	-65	550	82
Sheep/lambs	1,221	1,186	1,600	--	--	705	2,279	4,207	-42	497	85
Total livestock	11,647	14,753	13,100	--	--	18,513	56,028	71,216	59	285	27
<b>Poultry</b>											
Layer hens	43,981	20,625	47,700	--	--	537,826	1,113,746	1,611,662	1,123	200	45
Broilers	17,382	26,331	110,500	--	--	38,285	1,924,807	3,286,456	120	8,484	71
Turkeys	--	--	--	--	--	750	9,138	98,653	--	13,054	980
Other/unclass.	--	--	--	--	--	226,105	111,359	17,244	--	-92	-85
Total poultry	61,363	46,956	158,200	--	--	802,966	3,159,050	5,014,015	1,209	524	59
<b>Total certified operations<sup>1</sup></b>	<b>3,587</b>	<b>3,536</b>	<b>4,060</b>	<b>4,856</b>	<b>--</b>	<b>5,021</b>	<b>6,592</b>	<b>6,949</b>	<b>40</b>	<b>38</b>	<b>5</b>

<sup>1</sup> Number does not include subcontracted organic farm operations.

Numbers may not add due to rounding.

Source: Economic Research Service, USDA

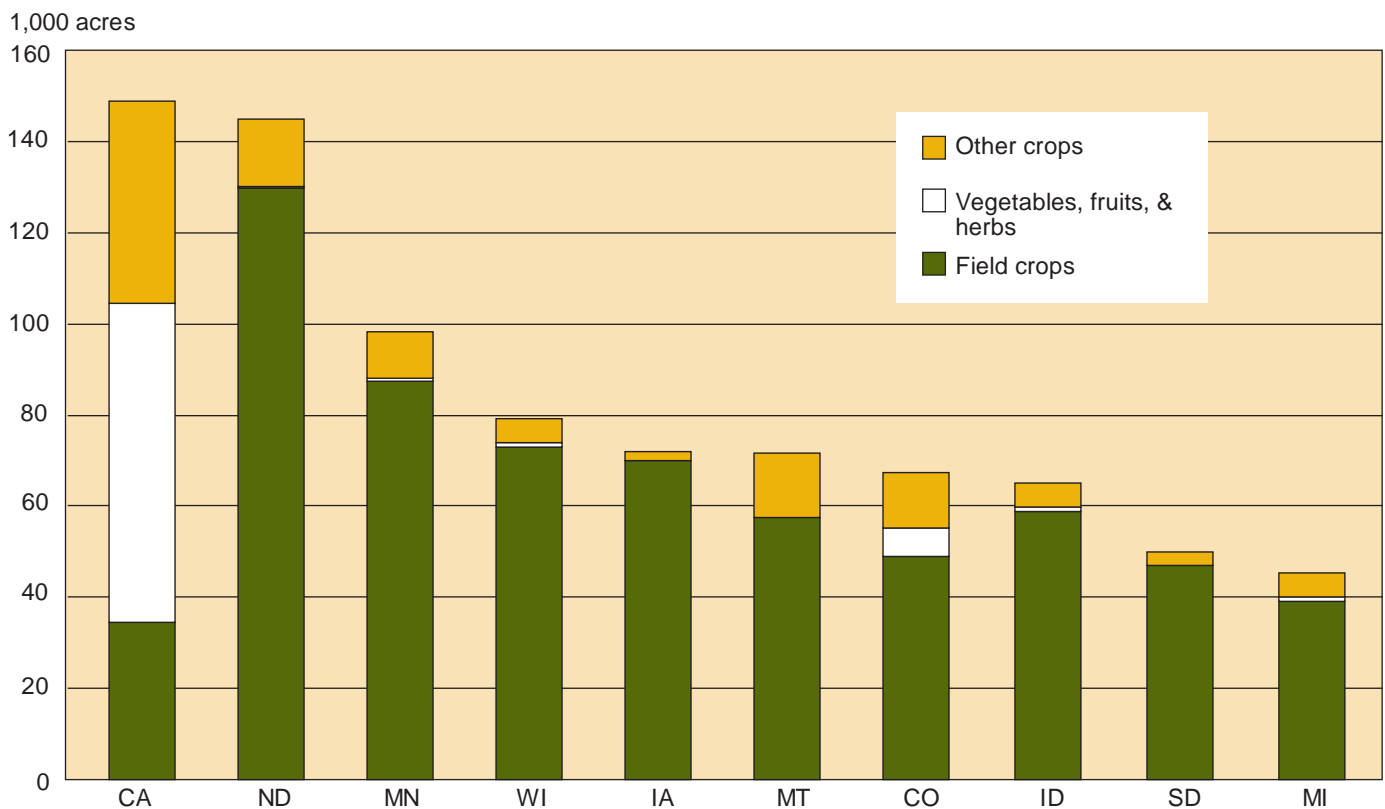
Nine States, over half in the Southeast (Georgia, Louisiana, South Carolina, Tennessee and West Virginia), showed an overall decline in certified organic farmland between 1997 and 2001 (table 3). The Southeast has had less certified organic farmland than other regions in general, and most of the certification in these States has been by small, local nonprofits. A number of these certifiers chose to drop their certification programs when national rules were implemented, to focus instead on community outreach for sustainable agriculture, and this transition has likely caused some disruption in certification services for some organic growers in the region. However, several certifiers—existing organizations that are expanding their range of service, and new certifiers that have recently emerged in that region—are filling in for services that were lost during the transition.

Organic farmland also fell in Florida and Idaho between 1997 and 2001 because wild crop operations that harvested saw palmetto berries and St. John’s wort discontinued their organic certification. Idaho also experienced severe drought conditions between 1997 and 2001, which lowered planted acreage in both conventional and organic farm sectors. Acreage also fell substantially in Alaska because the large ranches that had experimented with organic livestock production in the State’s western region during the late 1990s discontinued certification.

Overall, certified organic cropland and pasture accounted for 0.3 percent of U.S. cropland and pasture in 2001 (0.4 percent for cropland and 0.2 percent for pasture). Between 1 and 5 percent of top specialty crops—lettuce, carrots, apples, and grapes—were grown under certified organic farming systems, and tomatoes and citrus were nearly 1 percent (table 4, p. 15). Although only 0.12 and 0.24 percent of the top U.S. field crops—corn and soybeans—were grown under certified organic farming systems, organic management was used for at least 1 percent of rice, millet (4 percent), dry beans, and flax (3.5 percent).

**Farm Size and Numbers.** This study provides the first estimates of the number of certified organic operations by State. The number of U.S. certified growers, however, is an underestimate because some certified organic operations subcontract production with a number of growers. California had more certified operations than any other State, with slightly over 1,000 operations in 2001, up 12 percent from the previous year. Other top States for operations certified were Washington (548 operations), Wisconsin (469), Minnesota (421), Iowa (384), Pennsylvania (281), Ohio (265), New York (264), Vermont (251), and Maine (244). Only 4 of the top 10 States in certified operations—California, Minnesota, Iowa, and Wisconsin—are also among the top 10 for certified acreage (fig. 1).

**Figure 1--Certified organic crop acreage, top 10 States, 2001**



Source: Economic Research Service, USDA.

**Table 3—Certified organic acreage by State, 1997, 2000, and 2001**

State	Certifiers active by State			Total certified acreage		
	1997	2000	2001	1997	2000	2001
		<i>Number</i>			<i>Acres</i>	
U.S. total	40	53	53	1,346,558	2,029,073	2,343,924
Alabama	1	3	1	1	495	35
Alaska	1	1	1	174,190	168	168
Arizona	3	5	5	9,861	7,849	8,933
Arkansas	3	5	5	997	20,107	24,848
California	6	9	11	102,819	157,804	163,158
Colorado	3	6	7	258,873	602,463	581,614
Connecticut	2	3	3	1,066	1,190	1,430
Delaware	1	0	0	165	-	-
Florida*	4	5	6	32,745	5,136	12,059
Georgia	1	2	3	572	633	546
Hawaii	4	6	7	595	699	736
Idaho*	3	2	3	111,430	108,609	84,048
Illinois	2	8	8	10,699	19,467	21,324
Indiana	3	7	8	1,994	5,617	4,175
Iowa	4	9	8	35,769	68,939	80,354
Kansas	3	5	5	24,314	34,867	29,480
Kentucky	1	1	1	5,666	6,291	6,552
Louisiana	1	2	1	371	161	96
Maine	3	2	1	6,761	9,363	9,785
Maryland	2	3	3	1,645	3,009	3,590
Massachusetts	3	5	5	1,134	1,265	1,269
Michigan	2	8	9	16,762	31,348	46,485
Minnesota	5	8	8	63,685	81,953	103,297
Mississippi	0	0	0	-	-	-
Missouri	3	8	9	8,300	11,748	13,310
Montana	4	5	6	80,112	121,175	209,025
Nebraska	3	5	5	29,208	47,615	47,003
Nevada	1	3	3	255	3,032	1,954
New Hampshire	1	3	1	265	495	510
New Jersey	1	2	4	1,334	2,094	6,982
New Mexico	4	4	4	26,455	40,826	42,113
New York	4	7	9	27,718	46,089	45,086
North Carolina	4	2	2	980	1,474	1,377
North Dakota	2	4	5	90,790	153,737	159,300
Ohio	3	4	5	12,015	40,213	41,460
Oklahoma	3	4	2	3,992	3,206	3,922
Oregon*	1	3	7	16,984	26,958	27,501
Pennsylvania	5	9	8	6,511	18,873	20,984
Rhode Island	1	1	1	132	156	210
South Carolina	2	1	1	41	168	14
South Dakota	3	6	6	32,319	46,532	57,417
Tennessee	1	1	2	1,351	1,434	300
Texas	2	4	6	30,880	100,726	266,320
Utah	3	5	6	20,215	30,891	33,530
Vermont	2	2	2	21,146	29,170	30,659
Virginia	4	4	3	4,416	9,520	7,428
Washington	3	5	5	11,459	37,731	34,238
West Virginia	3	2	2	733	565	540
Wisconsin	3	7	9	47,622	80,285	91,619
Wyoming	1	3	3	75	6,927	17,138

\*Three States reported significant wild-crafted acreage in 1997: Florida (25,000 acres), Idaho (52,388 acres), and Oregon (6,000 acres).

Source: Economic Research Service, USDA.

Many of the top States in operations certified are States with a high proportion of small farms that grow fruits and vegetables for direct marketing to consumers. California, Washington, and 8 upper Midwest and Northeastern States had 240 or more certified organic operations (fig. 2). California has the most certified organic cropland in the United States, and has the Nation's largest concentration of fruit and vegetable producers, both conventional and organic. Washington and the Northeastern States have a relatively small amount of cropland, but have a large concentration of market gardeners. Most of the organic acreage in the North-Central and upper Midwestern States is used for grain, bean, and oilseed production. Certified organic pasture and ranchland was concentrated in three States—Colorado, Texas, and Montana—although over 40 States had some certified organic pasture in 2001. Most Southeastern States had very little certified organic cropland, pasture, or operations.

California, the top State in certified organic acreage and operations, also hosts the majority of large organic fruit and vegetable operations. The average size of certified organic operations in California more than tripled between 1985 and 1991 (Greene, 1992). Still, most of the

organic farms remain small. A recent University of California study indicates that the State's organic farms remained small (under 5 acres on average) throughout the late 1990s (Klonsky et al., 2002). The average size of certified organic farm operations is up in California and the U.S. as a whole, as existing organic farmers expand their operations and new large-scale operations become certified. Even so, small-scale farms remain the prevalent organic operation.

The United States had 6,949 certified organic operations in 2001, an addition of nearly 2,000 certified operations since 1997. The percentage increase in the number of certified operations (38 percent) between 1997 and 2001 was substantially less than the increase in farmland certified (74 percent) (table 2). Similarly, certified farmland rose 16 percent from 2000 to 2001, while certified operations were up only 5 percent. Estimates of the average size of certified organic farms, based on these data, would underestimate total farm size because many growers also have conventionally managed farmland. Nearly a quarter of the respondents to the most recent Organic Farming Research Foundation survey of certified organic growers indicated that they had mixed conventional and organic operations (Walz, 1999).

### **Certified Organic Farming: Methods and Data**

USDA began analyzing data from State and private certification groups in the early 1990s to estimate certified organic farmland acreage and livestock numbers (Dunn 1995a, 1995b). More detailed estimates were gathered for 1997 and analyzed by commodity and by State (Greene, 2001). This report follows similar procedures, collecting and analyzing 2000 and 2001 data from State and private certifiers.

Noncertified organic production was excluded, even though it may be a large segment of U.S. organic production.

California, for example, required farmers who market their crops as organic to register, but did not require certification prior to national rules taking effect. Certified organic farms represented only 41 percent of all registered organic farms in California in 1998, although they represented 88 percent of acreage and 91 percent of sales (Klonsky et al., 2002).

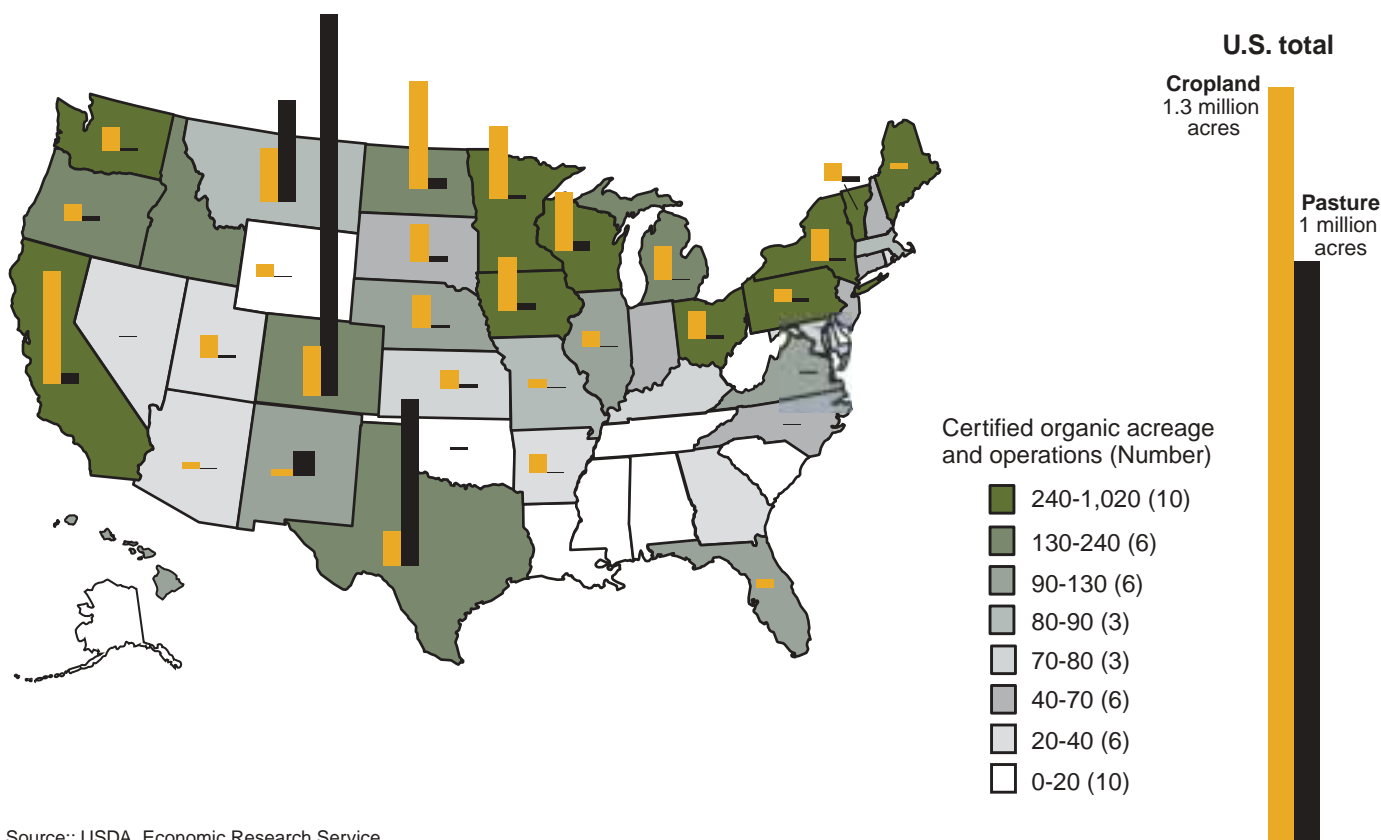
USDA excluded noncertified production because of the difficulty in "determining whether or not uncertified producers are farming organically according to a defined set of production criteria" (Dunn, 1995a).

The acreage data collected from certifiers refer to planted acres rather than harvested acres. Certifiers were asked to report only one crop per acre in each year to be consistent with the Census of Agriculture, but this method undercounts actual crop acreage because many organic farmers grow several cash crops and/or cover crops each year on the same acreage.

Also, a small number of producers obtain certification from more than one certifying agency to meet the expectations in their local, national, and export markets. Double-certified acreage was not extensive in the data collected from certifiers, and was excluded whenever possible to avoid double-counting.

A list of 60 organic certification groups was compiled from various national organic industry directories, as well as by word of mouth (Appropriate Technology Transfer for Rural Areas; California Alliance with Family Farmers; Organic Farming Research Foundation; and Organic Trade Association, USDA National Organic Program). These certification groups were contacted to determine if they certified

Figure 2--U.S. certified organic acreage and operations, 2001



Source: USDA, Economic Research Service.

farmers and were active in 2000 and 2001. Seven had become inactive or were not yet active in 2000 and/or 2001, some provided support services but not certification, others certified processors but not farmers, and a few could not be reached by phone or mail. Fifty-three of the 60 certification organizations were determined to be actively certifying farmers in 2000 and 2001 (table 1).

Membership directories, acreage reports, and other sources of certified acreage and livestock data were obtained from these 53 certifiers to estimate certified acreage in 2000 and 2001 by State and for major crops. The California Agricultural Statistics Service calculated the acreage and livestock numbers certified by one major certifier based on the office records of that organization. Data from all the certifiers were sorted into the major crop and livestock sectors defined by the Census of Agriculture, and acreage of the major commodities within each farm sector was also calculated.

The format of acreage and livestock data in certifier reports varied substantially. Most reports showed an acreage break-

down by crop and by State or by farm (some down to less than a tenth of an acre). Some showed acreage or numerical data for major categories of crop and livestock production but not for individual commodities.

Seventeen of the private certifiers provided certification services in more than one State in 2001. Several of these certifiers provided services in only a couple of adjacent States, but 3 of them provided services in 20 States or more.

Certified organic acreage and livestock estimates were calculated by State and by commodity in 2000 and 2001, with some exceptions. Some certifiers were able to give only estimates of acreage based on average operation size and type of operation. Second, data that could not be broken down by commodity are reported in aggregate. Acreage that could not be classified by crop category varied: 4 percent of grain acreage could not be classified by crop; 6 percent of bean acreage; 18 percent of oilseed acreage; 35 percent of hay acreage; 49 percent of vegetable acreage; 24 percent of fruit acreage; and 35 percent of acreage designated as "other crops" or "other land."