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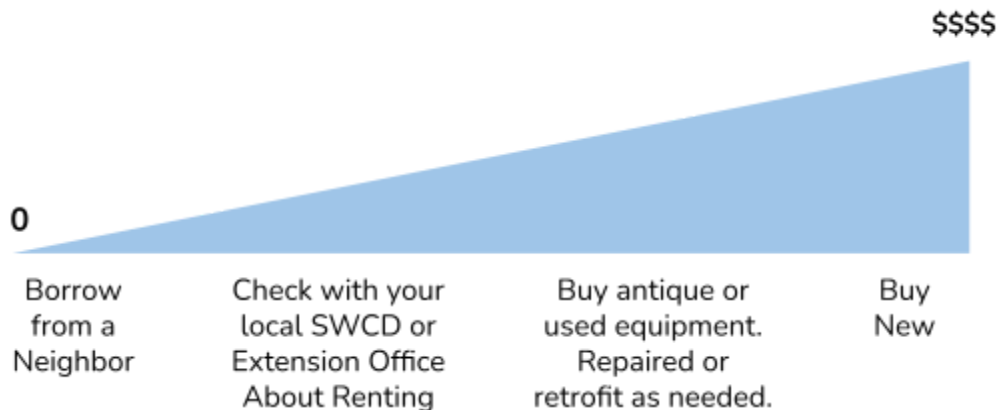
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National Institute of Food and Agriculture
U.S. DEPARTMENT OF AGRICULTURE

Understanding Equipment Options

When it comes to the equipment needed for grain farming, we recommend that you look at what you have or can borrow first, especially if just trying it out. A number of Soil and Water Conservation Districts have equipment for rent as well. Below you will find suggested equipment and a list of resources available. Please contact CGA with any questions and we would be happy to try and help identify the best path forward for your farm plan.



Known VA Soil and Water Conservation Districts with Equipment for Rent

1. **Piedmont** - (434) 392-3782, <https://piedmontswcd.org/>
2. **Hanover-Caroline** - (804) 537-3009,
<https://www.hanovercounty.gov/313/Hanover-Caroline-Soil-and-Water>
3. **Northern Neck** - (804) 313-9102, <https://www.nnswcd.org/>
4. **Clinch Valley** - (276) 415-3526, <https://clinchvalleyswcd.org/>
5. **Pittsylvania** - (434) 432-9455 Ext 3079,
<https://www.virginialandcan.org/local-resources/Pittsylvania-Soil-and-Water-Conservation-District/6051>

To look for additional information, visit

Virginia Association of Soil and Water Conservation Districts: <https://vaswcd.org/>

Virginia Cooperative Extension: <https://ext.vt.edu/>

Equipment Overview for Different Scales

Size	Garden	Small	Mid	Large
Plot size	< 1 acre	1-10 acres	11-100 acres	> 100 acres
Planting & Cultivating	Hand tools	Small tractor	Bigger tractor	Huge tractor
Harvesting	Hand tools, household supplies	Pull-behind implements or custom	Pull-behind or small combine or custom	Combine
Drying & Storage	Household supplies, grain bags	DIY dryers, grain bags	Batch dryer, bins, augers, grain bags	Same
Cleaning	Buckets, a fan, & a tarp	Custom or antique / small tools	On-farm or custom	Same



Marketing	Home use	Retail	Direct market & Processors	Processors
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*For more info on CGA visit: commongrainalliance.org
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Equipment Options and Examples

Preparing the Soil/Cultivating

Some grains are planted in rows, like vegetables—others are planted in blocks, but for both you want to start with as weed-free a field as you can.

For Garden Scale:

	<p>Silage Tarp ~ \$100/1000 sq ft</p>
	<p>For Gentle Tillage Broadfork, or chisel plow, followed by a light raking or discing</p>
	<p>For Primary Tillage \$100-200</p>
	<p>Roller ~\$375</p>





6" Tine Weeder
~\$25-\$40

For Small-Large:



Primary - Chisel Plow
~\$500-\$2000



Secondary - Disk Harrow
\$1,000-\$5000



Einbock Tine Weeder
~\$3,500 for 5ft version
~\$7,000 - \$12,000 for 15-20ft versions
+\$14,000 for 30 ft version



Spike tooth drag harrow
~\$500





Flame Weeder
?

Seeding

For Garden Scale:



Hand Sowing



Earthway Seeder
~\$100-\$200

For Everyone Else:



2-row corn planter
\$200+








Small drill
~\$50,000



Harvesting

For Garden Scale:

	<p>Hand sickle ~\$20-\$100</p>
	<p>Thresh ~\$0</p>
	<p>Shock ~\$0</p>
	<p>Winnow ~\$20-200 for a fan</p>
	<p>Lehmans \$79 10-15 bu/hr</p>



For Everyone Else:



New Idea 324/329 Corn picker-sheller
~\$900



Rotary Screener
~\$500-\$3,750



Wincing Machine
~\$150 - \$1,000







Mini Combine
~55,000-70,000



Combine
\$50,000 - \$100,000



Drying & Storage

 A handheld moisture tester, a black device with a digital display and buttons, used for measuring the moisture content of grain. It is shown next to a clear plastic container filled with grain.	<p>Handheld Moisture Tester ~500-\$700</p>
 A large, cylindrical batch dryer on wheels, used for drying grain in large quantities. It is shown outdoors next to a wooden structure.	<p>Batch Dryers</p>
 A DIY mini batch dryer, a small, cylindrical metal unit with a fan and a perforated pipe, used for drying grain in small batches. It is shown in a storage bin.	<p>DIY Mini Batch Dryer Fan taken from a storage bin Connected to a perforated drainage pipe Run pipe through grain in a bag or bin to air dry Easy and cheap for small- and mid-scale</p>
 A corn crib, a structure made of wooden slats, used for drying and storing corn. It is shown from an elevated perspective, showing the slats and the grain inside.	<p>Corn Crib Price of lumber and labor</p>





Grain Bags & Bins

Wide price range

Bags & Bins come in many sizes. Ideally grain is cleaned before storage.



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