When a farmer ends up with damaged grain at harvest, the best thing to do is sell it as quickly as possible. However, sometimes due to the obligation to fulfill contracts or the ability to utilize bin space to capture carry in the market, it becomes necessary to store damaged grain.

The following are some best management practices to maintain storage quality and reduce the risk of further deterioration once the grain is in the bin. Many of these are ideal practices for storing good quality grain as well, but they are especially important when storing damaged grain.

1. Scout
   - Identify ear molds in the field so you can harvest potentially problematic fields first.
   - Identify specific diseases so you can manage risk of damage and toxins.

2. Calibrate
   - Increase fan speed to keep damaged kernels out of your bin.

3. Dry
   - Dry grain quickly and to lower moisture content than high-quality grain. Moisture can allow molds to spread in the bin.

### Time-frame for Removing Grain From Storage

<table>
<thead>
<tr>
<th>Time-frame for Removing Grain From Storage</th>
<th>Ideal Moisture for Storing Grain: Corn</th>
<th>Ideal Moisture for Storing Grain: Soybeans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mid- to Late- Winter (Before Spring Warm-up)</td>
<td>14.5%</td>
<td>13.0%</td>
</tr>
<tr>
<td>Spring or Summer (After Spring Warm-up)</td>
<td>13.0%</td>
<td>11.0%</td>
</tr>
</tbody>
</table>
STORING DAMAGED GRAIN

4. Fill
Avoid blending good grain with damaged grain — you’ll risk lowering the overall quality. Use a spreader to fill the bin evenly—good airflow is essential to storing damaged grain.

5. Aerate
Keep temperatures consistent throughout the bin. Take your time when lowering bin temperatures after harvest and again in spring warm-up.

6 & 7. Monitor & Market
Check bins every two weeks. Sell damaged grain first. No matter how well you manage the grain, quality is not getting any better.

4. **Filling the bin.** Store your damaged grain in your best bin with the best aeration and least potential for leaks. If you don’t have any bins with full aeration floors, put some clean grain in the bottom of the bin first so that all of the damaged grain can be adequately aerated. It may be tempting to blend off damaged grain with good grain. If you want to blend grain, do it as you are emptying the bins, not as you are filling them. Using a spreader to fill the bin improves distribution of fines and damaged kernels, which allows for consistent airflow throughout the bin. After filling the bin, be sure that the top of the grain is level because a peak can restrict airflow. This can be done by using a spreader to fill the bin, or by removing some grain after the bin is filled to draw down the peak.

5. **Maintain good aeration.** Moisture migration is a process by which some grain in a bin gives off moisture and it moves to other areas where it is absorbed by other grain. This process is driven by inconsistent temperatures throughout the bin and results in wet pockets of grain where molds can grow and spread. To prevent moisture migration from occurring, keep temperatures consistent throughout the bin through proper aeration.

6. **Monitor bins carefully.** Check bins every two weeks for changes in grain quality. Use a probe to pull samples from down in the grain to check moisture and temperature. Look for condensation, crusting, wet areas, molds, insects, and hot spots. Run fans briefly to check for odors. If there are any signs of hot spots, run fans continuously until they are gone. If you detect signs of grain quality further deteriorating, consider selling the grain. It may be better to sell grain early for a lower market price than to allow grain quality to decrease to the point of being undeliverable or subject to severe quality discounts.

7. **Sell damaged grain first.** As soon as you begin emptying bins to haul grain to its final destination, empty bins containing damaged grain first. If possible, avoid storing it into spring to reduce complications caused by warming spring temperatures.

Sources: