An interest in owning a dairy calf for a 4-H project may result from visiting a fair, knowing another 4-H member or from just having a love of cows. Any animal is an everyday commitment, but cattle also add another aspect because of their large size and greater need for housing space and feed storage.

You need to literally count the costs before entering a 4-H dairy project. It’s a very rewarding project which provides a lot of additional opportunities such as showing at the fairs, attending the Eastern States Exposition, cattle judging and quiz bowl. The project is broader than the activities in that it helps develop an understanding of the dairy industry and may open up future career options.

The mission of 4-H is to assist youth in acquiring knowledge and develop life skills that will be with them when they become adults. As the 4-H’er is taught technical subject matter about dairy cattle, these life skills become part of the process. Life skills include relationships with people, communication, decision making and interacting in groups. Not only do the youngsters learn about their animal, they better understand themselves.

Who is Eligible?

The 4-H program is the youth development component of UNH Cooperative Extension. It is an informal educational program offered free of charge to youth 8-18 from all economic and cultural backgrounds. Members and volunteers live in towns, cities, farms and suburbs.

There is often the perception that a 4-H member has to live on a farm to have a 4-H dairy project but this isn’t necessary. More and more of our dairy members aren’t “farm kids.” Animals can be owned by 4-H’ers and housed at a dairy farm where they can go and take care of them, or they can be leased.

Leasing avoids the high initial cost of the animal and allows the member to use the animal on a yearly basis. An official lease agreement is filed with the 4-H office and the farmer continues to own the animals while the 4-H’ers have the benefit of caring for and showing them as if they were their own. It also provides the flexibility of participating for a year and then discontinuing if a decision is made to switch to another project area. A 4-H member may lease up to two to three animals per year.

You can have a 4-H dairy project if you don’t own or lease an animal. In this case, the member learns about dairy science, but does not participate in local fairs or shows. However, the fullest experience does come through participation in the total project, including animal care.

How to Start

Call the UNH Cooperative Extension office in your county. A listing of these can be found at http://extension.unh.edu/ on the Cooperative Extension website. Talk to the
county 4-H Youth Development Educator and explain your interests and the town that you are from. Within the counties there are various 4-H clubs organized either by towns or by project specialty. It might be a dairy club or it could be a general club involved with all different project areas.

The 4-H office can get you in contact with local leaders in charge of the 4-H club near you and supply the details of meeting places and times. A 4-H member may also carry the project as an independent member if a club isn’t nearby. However, club membership provides the broadest experience with the opportunity to participate in other areas such as citizenship, safety and more.

The 4-H program emphasizes family involvement. As you enter into it, everyone needs to make a commitment to devote the time necessary to make it a positive experience. The club meetings may occur one or two times a month; there are special clinics and activities during the winter and spring plus the fairs in the summer. Parents are often called upon to help with transportation, supplying refreshments, or serve as chaperones. If you don’t anticipate this, it can take you by surprise but with proper planning, 4-H can be an integral part of your family.

**When is a Good Time to Start?**

The 4-H year somewhat follows the school year, in that the clubs get more structured as the school year starts. An attempt is made to have activities revolve around school breaks. During summer vacation, things are less structured and focused more on fair activities. A new member should try to join either in the fall or during the winter or they may feel like they’re starting in the middle of things. However, members are accepted anytime during the year.

In order to show at 4-H fairs, members must have their animal either owned or leased, in their name, by **May 1** and registered with the 4-H office. This is done through the 4-H **Livestock Approval Form** obtained through the 4-H county office. Generally 4-H dairy members purchase any new animals in late winter or early spring to get ready for the next show season. This is done so a 4-H member can become familiar with the management of their animals before they exhibit them. You may obtain animals by attending one of several purebred calf and cow auctions held around New England or by dealing directly with a farmer for a purchase or lease arrangement.

**Showing Competition**

The showing competition is divided into two categories - FITTING AND SHOWMANSHIP and the TYPE SHOW. The Fitting and Showmanship competition judges the exhibitors on how well they have fitted and groomed the animal for show. This puts everyone on an equal basis regardless of how fancy the animals are, because the judge is evaluating the performance of the exhibitor. This competition is divided up into four divisions:

- Senior 14 - 18 Years Old
- Junior A 12 - 13 Years Old
- Junior B 9 - 11 Years Old
- Novice Age 8 and first year showing up to age 13

The type show is run separately, and animals are judged in classes by age brackets and exhibitors of all ages compete with one another. In these classes the judge ranks the animals according to their conformation to the breed standard.
It is beneficial to purchase calves born at the beginning of these age brackets so you can have a size advantage in the show ring. It is advisable for a beginning dairy member to start with calves because they are easier to control. The youngest divisions are:

- Junior Calf Born March 1 to April 30 of the show year
- Intermediate Calf December 1 prior year to February 28 of show year
- Senior Calf September 1 to November 30 of year prior to show season

Each year these animals progress to another class division as they grow older, such as junior yearling, senior yearling and 2 year old.

An important consideration when entering the show circuit is the cost of transporting the animal. Owning your own trailer may be too expensive, so be sure to inquire about the cost of hiring someone to transport. Sometimes transportation can be shared with other 4-H families.

**What Breed of Cattle Should Be Used?**

The choice of the breed of cattle to use in a 4-H dairy project is a matter of personal preference. It may relate to the availability of animals in your area. If the 4-H member gets overwhelmed with a lot of competition, a Holstein may put them in too large a class, since that is one of the more common breeds. An exhibitor who is small in stature may want to pick a breed that does not grow very large so it’s easier to handle. Following is a brief description of these breeds:

**Ayrshire**
- characterized by red and white color
- medium-sized cow

**Holstein**
- black and white color
- very large animal
- comprise 90% of cattle in U.S.A.

**Jersey**
- colors include various shades of fawn and dark brown, with or without white markings
- very small and gentle animal

**Milking Shorthorn**
- colors are red, white, and roan
- medium sized, docile breed; bull calves are valuable for oxen

**Facilities Needed**

If you are going to house the animal on your premises, below are some considerations.

1. Check the zoning laws to make sure farm animals are permitted.

2. Provide adequate housing. The area should be clean and dry, free from drafts, with adequate sunlight and ventilation. Young animals need some warmth, but closing up a building too tightly can create poor air quality and result in health problems. A
baby calf needs a pen about 4 feet x 8 feet with a grain box, hay rack and place for a water pail.

3. Allow space for materials handling. There needs to be an area for storing hay, grain and equipment plus provision for disposing of manure properly. A mature cow will make 20,000 pounds of manure per year which takes about 725 cubic feet of outdoor storage space. Local ordinances and neighborhood concerns can be a major limitation on how manure is handled.

4. Plan for adequate utilities. Cattle drink a lot of water so running water with tubs or water cups is a must. Electricity will be needed for lighting, using hair clippers, milking machines, etc.

5. Provide an adequate exercise area. If possible, calves and cows should have access to an outside area which can be fenced with either barbed wire, a board fence or electric fence. If an attempt is made to pasture the animal on feed during the summer allow 1-2 acres per 1,000 pounds of animal. Better results are obtained by dividing the pasture into small plots which can be rotated rather than letting the cattle roam over the entire area. With no pasture, the animal can be maintained in the barn with a balanced forage and grain ration.

**Equipment to Get Started**

There are many miscellaneous pieces of equipment needed to raise a calf and then fit it for show. Some items can be obtained second hand or shared with another 4-Her. Here is a list of some of the common items, many of which are associated with showing at the fair:

<table>
<thead>
<tr>
<th>Supplies</th>
<th>Estimated Cost</th>
<th>Supplies</th>
<th>Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Show Box (build your own)</td>
<td>$25.00</td>
<td>Blades</td>
<td>24.00</td>
</tr>
<tr>
<td>Rope Halter</td>
<td>6.00</td>
<td>Clipper Maintenance and oil</td>
<td>5.00</td>
</tr>
<tr>
<td>Leather Halter</td>
<td>26.00</td>
<td>Water Bucket</td>
<td>8.00</td>
</tr>
<tr>
<td>Canvas Blanket</td>
<td>47.00</td>
<td>Wash Bucket</td>
<td>2.00</td>
</tr>
<tr>
<td>Sweat Blanket</td>
<td>5.00</td>
<td>Feed Tub</td>
<td>11.00</td>
</tr>
<tr>
<td>Fine Brush</td>
<td>5.00</td>
<td>Hose</td>
<td>20.00</td>
</tr>
<tr>
<td>Course Brush</td>
<td>6.00</td>
<td>Miscellaneous</td>
<td>20.00</td>
</tr>
<tr>
<td>Curry Comb</td>
<td>2.00</td>
<td>(soap, polish, alcohol)</td>
<td></td>
</tr>
<tr>
<td>Tail Comb</td>
<td>5.00</td>
<td>Show Clothes</td>
<td>30.00</td>
</tr>
<tr>
<td>Wash Brush</td>
<td>3.65</td>
<td>Rubber Boots</td>
<td>25.00</td>
</tr>
<tr>
<td>Clippers</td>
<td>150.00</td>
<td><strong>Total Cost</strong></td>
<td><strong>$425.65</strong></td>
</tr>
</tbody>
</table>

**Costs of Raising an Animal to Maturity**

Dairy heifers generally reach maturity at two years of age when they have their first calf. It takes a lot of feed to get an 80-100 pound calf to 1,200 pounds as a two year old. Following is a budget showing the types of items and cash costs needed to raise a heifer to 24 months of age (not including the initial purchase price of the animal which might be anywhere from $150-$600 or more.
<table>
<thead>
<tr>
<th>Item</th>
<th>Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feed</td>
<td></td>
</tr>
<tr>
<td>milk replacer (50 pounds)</td>
<td>31.00</td>
</tr>
<tr>
<td>calf starter (80 pounds)</td>
<td>8.00</td>
</tr>
<tr>
<td>grain (1860 pounds)</td>
<td>164.00</td>
</tr>
<tr>
<td>hay (5.5 tons)</td>
<td>688.00</td>
</tr>
<tr>
<td>salt and minerals (110 pounds)</td>
<td>9.00</td>
</tr>
<tr>
<td>Veterinary and Medicine</td>
<td>46.00</td>
</tr>
<tr>
<td>Breeding</td>
<td>24.00</td>
</tr>
<tr>
<td>Supplies</td>
<td>36.00</td>
</tr>
<tr>
<td>Bedding</td>
<td>50.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$1056.00</strong></td>
</tr>
</tbody>
</table>

**Animal Welfare and Safety**

With the concern about animal welfare today, it's important that 4-H members understand and practice good animal care and handling. Here are some guidelines to follow to avoid problems.

1. Use a low bed trailer or truck to avoid steep ramps when loading animals. Practice loading and unloading at home.

2. Always hitch the animal using a quick release cow hitch knot.

3. Lead the animal with the proper size halter to gain control and avoid a lot of pulling and fighting.

4. Train the animal well in advance of the show to prevent things from getting out of control.

5. Move the animal with commands and gestures in the ring and avoid slapping and hitting. Practice at home until the animal moves easily.

6. Keep animals in heat to the side of the ring and communicate your situation to the judge.

7. Know your animal and your subject matter and be prepared to give a correct and polite answer to anyone questioning you about the welfare and care of the animal.

8. Watch your animal closely to see that any health problems are treated promptly.

**Summary**

*A 4-H Dairy project is a big commitment but it pays big dividends. There are many farmers, businessmen and veterinarians who trace their beginnings in the agricultural industry back to a 4-H project.*

4-H members who raise animals learn about and practice decision making, record keeping and time management. Youth who take advantage of these opportunities develop good communication skills as well as leadership skills. As you enter the project, be sure your whole family is ready for the commitment and has counted the costs. The dairy project is more than raising animals, it builds character and responsibility that carry through for a lifetime.

*Visit our website: ceinfo.unh.edu*

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