discovered that many of the areas scheduled for mapping were horribly unforgiving places. The burning wood nettle often was 10-foot tall and poison ivy was rarely content to remain a vine or even a shrub; it was often present as small one-to-two inch diameter trees. What's more, I am sure none of us will ever forget how hot it was that summer. Admittedly, the harsh conditions temporarily dampened the spirits at times, but in the long run, it had little impact on the overall quality of my summer with the Corps. The many humorous occasions certainly overshadowed any apparently trying times. Included in the following are just a few of these moments that have not escaped my memory.

- 1. Travelling by boat to Huron Island with an archaelogist who had just finished his doctorate degree. We had some good conversation and he even managed to convince me that archaelogy could be exciting, at least for the moment. When we finally arrived at the island we proceeded to dig some holes and a few deep pits in various locations inside the boundary of an area that was scheduled for a five acre patch clearcut the following winter. If the sediment depth was two feet or more we could be confident that logging activity would not unearth ancient Indian relics. I was hoping to find evidence of Tom Sawyer or Huck Finn, I'd even settle for part of their raft. This island was 1500 acres and was divided by many narrow sloughs and smaller waterways. We guite fondly referred to it as the lowa version of the Amazon jungle. Reaching the interior of the island by boat required all my refined skills. I was always careful to avoid the submerged logs that were rarely seen until they were first heard.
- 2. When stand-mapping in the backwaters of the Wapsipini-

- con River, my companion and I got lost. Somehow we managed to walk into a maze of waterways which could not be seen on the aerial photos. My companion had no boots on his feet so I carried him across these waterways. On more than one occasion I remember laughing so hard that I nearly dropped him.
- 3. The time when I got so excited over a stand of oak I found after mapping in silver maple cottonwood stands all day, that I tripped and fell headlong into some burning wood nettle.

Looking back on my summer experience. I feel very fortunate to have had the opportunity to work with such a variety of individuals, each one unique in his or her own way, with something different to offer. In my estimation, my biggest accomplishment for the summer was to realize this and to open my mind and ears to hear the wisdom of their years. Moreover, I am now thoroughly convinced that an ambitious approach to work, not the knowledge we acquire at the University, is our greatest asset to a summer employer. An honest desire to do more than what is expected will help one to develop a meaningful, working relationship with an employer. This positive attitude can transform a good experience into a great experience, like my summer with the Corps.



Urban Forestry

by Sharna Robinson

As spring rolls around, the thoughts of summer jobs start to creep into one's mind, especially when you still need to fulfill your Ag. 104 requirement. Such was my predicament last spring until Dr. Jungst informed me of the opportunity to apply for a job in Urban Forestry. The place was Ft. Dodge, la. and the mission was a city street inventory. As luck would have it, I did get the job which turned out to a summer full of adventure, learning, and fun.

The task of collecting data on all of a city's trees seemed almost impossible. But, with the guidance of City Forester Richard Straight (I.S.U. alumnus 1980), my partner Tammi and I managed to make fast work of the concrete forest.

The actual collection of data was not very difficult if one enjoys walking some three-hundred plus miles. My dendrology skills were greatly enhanced by the constant contact with trees and shrubs. The more challenging part of the job was tracking down streets from the city maps that were supposed to be there but weren't, or discovering a new street that had not yet been put on the map. These uninvited headaches were usually solved by a trip to the city engineer's office.

The most dangerous part of this job came in trying to explain to the grandmothers in housecoats. armed with brooms, rakes, and various other weapons, that you were only looking at the trees and not going to cut them down. Another treacherous part of the job was learning to dodge the children who consisted of anything from the teething toddler to the eight-year-old who wanted to lend a helping hand by donating his chain saw to help us cut down all the trees.

One of the most stimulating parts of my job was stumbling across an "unknown" species of tree or shrub and trying to decipher what it was. It is hard to believe some of the strange things we would find planted in the city parkways. We welcomed these "unknown" species as a nice change of pace from the typical ash, silver maple, and hackberry. These new species also gave us the chance to increase our knowledge, as well as attempt to stump the boss (which we rarely succeeded in doing).

Once we had the street tree inventory behind us, we made the move up the big ladder to the inventory of the city parks and green belt areas along the Des Moines River. This involved plotting trees of each park on a map along with collecting data for each tree. The green belt was inventoried by taking a simple random sample of the areas. Tammi and I managed to take a sample of more than just the tree species present, by geting a nice "feel" for the poison ivy in the area.

The summer experience I got as an urban forester was very good. I saw how forestry is an important aspect of managing city trees. The general exposure to solving unexpected problems that came up and working as a productive team with my partner and the forestry department personnel was also a very beneficial experience.

Llamas in the Rockies

by James Daniels

The use of llamas as pack animals in the United States is increasing in popularity. Llamas cause only light ecological impact, climb and jump well, and are easy to work with.

I worked with Ilamas last summer while doing trail work in the Mount Zirkel wilderness area in northwestern Colorado. The Forest Service rented the Ilamas on an experimental basis. The cost was 1000 dollars a head for four months. We used two Ilamas, each carrying 90-100 pounds.

Llamas originally came from the Andes in South America. All that are presently in the United States have been bred here since importation of llamas is banned. In fact, North American llamas have become quite larger because of our superior feed.

They are included in the camel family. Llamas may go for days without water. Their selection of food is broad, they browse on everything from grasses to trees and shrubs. Grain has little nutritional value for them, but is like candy to them. This is very useful for attracting and catching llamas.

The lower jaws of llamas have no teeth to speak of. This means that they must feed by pulling the vegetation (pulling rather than clipping) and the broad range of food makes for minimal vegetation disturbance. This may be important on fragile sites.

The hooves of llamas are small and are equipped with pads on the bottom. These pads are similar to those on a dog's foot. Because of this, trail and soil disturbance is slight. They also have good footing on bare rock.

We transported our llamas in a pickup truck with a stock rack which they could easily jump over. This gives you an idea of how well llamas can jump, they are very sure-footed.

Generally, llamas do not like to sink far in snow or mud. This may be a serious handicap if travel in snow around 1.5-2 feet deep is required. It's best to keep males and females separate in working situations. Llamas may mate anytime of the year and are known for taking advantage of that.

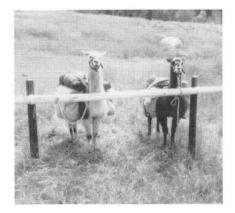
Llamas have the most mild, mellow temperament of any ani-

mal that I can think of. They are very inquisitive and almost never spook. Other people and animals seldom do more than make them curious. However, horses unaccustomed to llamas often become unusually nervous.

Llamas are quite gregarious and have a well established social order. Dominance is established by butting at the opponent's face, kicking at glands low in the hind legs, and spitting. It is best to avoid touching their heads or lower hind legs. Only bottle-fed llamas or very strongly dominant llamas will spit at humans. They never bite and only kick if their hind legs are touched.

On the trail, our llamas were contained by a 10 foot long picket rope. They may get the rope tangled, but they are intelligent enough to unwrap it themselves. If it is badly wrapped, a llama will simply lie down and wait for help. There were a few times when our llamas got loose last summer, but they were easily recaptured by the presence of the other llama and a bit of grain.

I was very pleased with the llamas I used and I became fond of them. I would suggest them for any kind of back country packing except in deep snow.



Foresters of the Future?

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