Rape for Forage

**General Information**
Rape is a multi-stemmed crop with fibrous roots. Stems vary in length, diameter, and palatability to livestock according to variety. The giant types are used for cattle and sheep pasture, while the dwarf type is best suited for finishing lambs. The giant types of rape have higher yields and are more palatable than the dwarf versions. Rape is ready to harvest about 90 - 120 days after planting and should be rotationally or strip-grazed. The plant develops a reddish tinge when ready for harvest. Rape leaves and stems have lower protein level (14-17%) than turnips. Leave a ten-inch stubble to facilitate rapid regrowth. Rapes can attain over 8,000-lb/acre of dry matter.

**Establishment**
Rape requires good soil drainage and the soil pH should be in the range of 5.5 - 6.8. Rape can be no-tilled into a sod, provided it has been killed with glyphosate. This reduces insect problems. They can also be seeded into wheat stubble. Clean till seeding works well but may have increased insect pressure. If seeding after crop farming, herbicide carryover residues are an enormous problem for rape. Some commonly used herbicides can affect the establishment and growth of turnips for up to 24 months. As a rule, carry-over label recommendations for sugar beets are usually applicable to most members of the turnips varieties. Use 3 - 4 lbs./acre of seed for rape; the higher seeding rate is recommended for spring planting. Rape can be seed conventional, no-till or aerial. Drill the seed on 6-8inch row spacing and place seed no more than ½ to ¼ inch deep.

Fertilizer should be applied at the time of seeding to give the rape competitive edge on weeds. Apply 75 - 80 pounds per acre of nitrogen and fertilize with phosphorus and potassium similar to what would be applied for a small grain.

**Management**
Rape crops are most often grazed. Rotational grazing or strip grazing help reduce trampling and waste by livestock. During the growing season, strip-grazing with a break wire in front of and behind the animals can be used to control consumption, allow regrowth, prevent wastage, and conserve available dry matter. Strip-grazing limits grazing damage to the root and lower leaf, allowing leaf surface for regeneration of plant growth. If regrowth is desired, at least ten inches of leaf should be left intact.

**Feed**
Rape is highly digestible and does not contain much “effective fiber” — the sort of fiber that makes an animal chew. Feeding extra fiber means more chewing and more salivation for the animal. It is important to feed dry roughage with rape in order to prevent disease problems and achieve
maximal daily gains. When introducing animals to rape, allow stock access to pasture, or feed hay, straw or silage before letting stock onto rape crop. This helps prevent gorging by some animals and helps rumen microbes adjust to the feed. Two to three pounds of grain, grass hay, alfalfa hay, or straw should be fed per head per day. Although quality need not be high, the palatability of the dry roughage must be good enough that the animal will consume adequate amounts daily. One alternative is to allow free access to corn stalk field adjacent to the rape field. Another alternative is to plant small grain crops with the rape.

References
Brassicas for Forage (AGF-020-92) Ohio State University Extension
Forages-Species: Brassicas, PennState University
Brassicas for Fall Grazing, David W. Koch, Extension Agronomist, Department of Plant Sciences