apple guild	layer	family	yield	N-fixer	Dyn Acc	pollinator	bloom time	mulch	other/notes
Siberian pea	3-shrub	Fabaceae	forage	x					planted in same hole as apple; remove after 5 years
Gooseberry/ Currant	3-shrub	Grossulariaceae	berries						shade for winter sun scald if planted to SW of apple
Sea buckthorn	3-shrub	Elaeagnaceae	berries	x		x			alternate for Ribes, plant where thorns aren't dangerous
Alfalfa	4-herbaceous	Fabaceae	forage	x	x		reblooms if mown		
Rhubarb	4-herbaceous		stalks					x	value-added product
Asparagus	4-herbaceous		stalks						
Nepeta faassenii, Hyssop, lavender, Monarda	4-herbaceous	Lamiaceae	nectar for honey			x	April-June		
Umbels: fennel, angelica, lovage	4-herbaceous	Apiaceae	herbs			x	July-frost, reblooms if cut		potential ingredient for partner
Echinacea	4-herbaceous	Asteraceae	flowers, medicinal			x	July-frost		
Dandelion	4-herbaceous	Asteraceae	flowers		x	x	May		wine
Yarrow	4-herbaceous	Asteraceae	flowers			x	August-frost		
Anise Hyssop	4-herbaceous	Lamiaceae	flowers			x	July-frost	x	
Perennial arugula	5-ground cover	Brasicaceae	greens		x?	x	July-frost, reblooms if cut	x	
Clovers	5-ground cover	Fabaceae	forage	x			reblooms if mown	x	
Comfrey	5-ground cover	Boraginaceae	medicinal		x	x		x	winter habitat for insects
Thyme	5-ground	Lamiaceae	herbs			x	June-July		light foot traffic
Alliums: walking, ornamental, shallots	7-root	Amaryllidaceae	onions, flowers			x	June		
Sunflowers	8-annual	Asteraceae	flowers, seeds			x	August-frost	x	bumblebees food, chicken fodder