Entity

Food

Foodtype (Enum)						
		amount				
	raspberry	1				
	apple	2				
	pineapple	3				

Gatherer

St	ate (E	num)						
	idle	following	wandering	charging	fleeing	collecting	beaten	exhausted

Task (Enum)

	arguments	description
follow	entity Entity	starts to follow entity
attackmove	gatherer Gatherer	starts to follow gatherer, attacks when close, steals food on successful attack
collect	food Food	starts to move towards food, collects when close
wander	count(optional) int or float	starts to wander randomly, optionally you can pass "approximate number of direction changes per 10 secs"
escape	entity Entity	starts to move in opposite direction of entity
cancel		cancels active task

Gatherer Abilities (can be used multiple times each step)

function	arguments	return	description		
self.assignTask(task, taskarg)	task Task taskarg Task/arguments		Assigns task, most recent task assigned will be executed in next step		
self.getdistance(entity)	entity Entity	distance(float)			
self.getdirection(entity)	entity Entity	angle(float)	returns relative direction angle for an entity's position such that		
			angle direction		
			0.0 north		
			90.0 east		
			±180.0 south		
			-90.0 west		
self.getfacing(gatherer)	gatherer Gatherer	angle(float)	returns facing angle such that if 0.0 other gatherer is directly facing, if 180 other gatherer is facing back (if 0.0 other gatherer may be charging at you!!)		
self.closestfood(foodtype=None)	foodtype(optional) Foodtype	Food	closest known food, None if no food known		
self.visiblefoods(foodtype=None)	lf.visiblefoods(foodtype=None) foodtype(optional) Foodtype		lists sorted wrt distance (closest has lowest index), None if no food visible		
self.knownfoods(foodtype=None) foodtype(optional) Foodtype		list(Food)	lists sorted wrt distance (closest has lowest index), None if no food known. Not all that is known is unpicked		
self.isvisible(food)	food Food	bool	if not visible, a known food may have already been collected!		
self.closestgatherer()		Gatherer			
self.visiblegatherers()		list(Gatherer)	lists sorted wrt distance (closest has lowest index)		
self.foodcarried(gatherer)	gatherer Gatherer	(int)	returns how fat is the gatherer's backpack, can pass "self"		
			%0-%25 0		
			%25-%50 1		
			%50-%75 2		
			%75-%100 3		
self.readytoattack()			returns True if attack is not in cooldown,		
, V			else return False		
self.checkstate(gatherer)	gatherer Gatherer	state(State)	returns current state of a gatherer, can pass "self"		
self.checkfoodtype(food)	food Food	foodtype(Foodtype)	returns enumerated foodtype e.g Foodtype.		