

## Additional file 8. Forest plots

### Overall effects on plants

- 2-3 Abundance and species richness of understorey vegetation as a whole
- 4-11 Abundance and species richness of subgroups of understorey vegetation
- 12-15 Abundance of individual genera of tree seedlings/saplings
- 16-18 Height of individual genera of tree seedlings/saplings
- 19-21 Abundance of single focal plant species
- 22 Richness of native and exotic understorey species
- 23 Survival of tree seedlings
- 24 Flowering and other reproductive efforts

### Modifiers of effects on plants: subgroup analyses

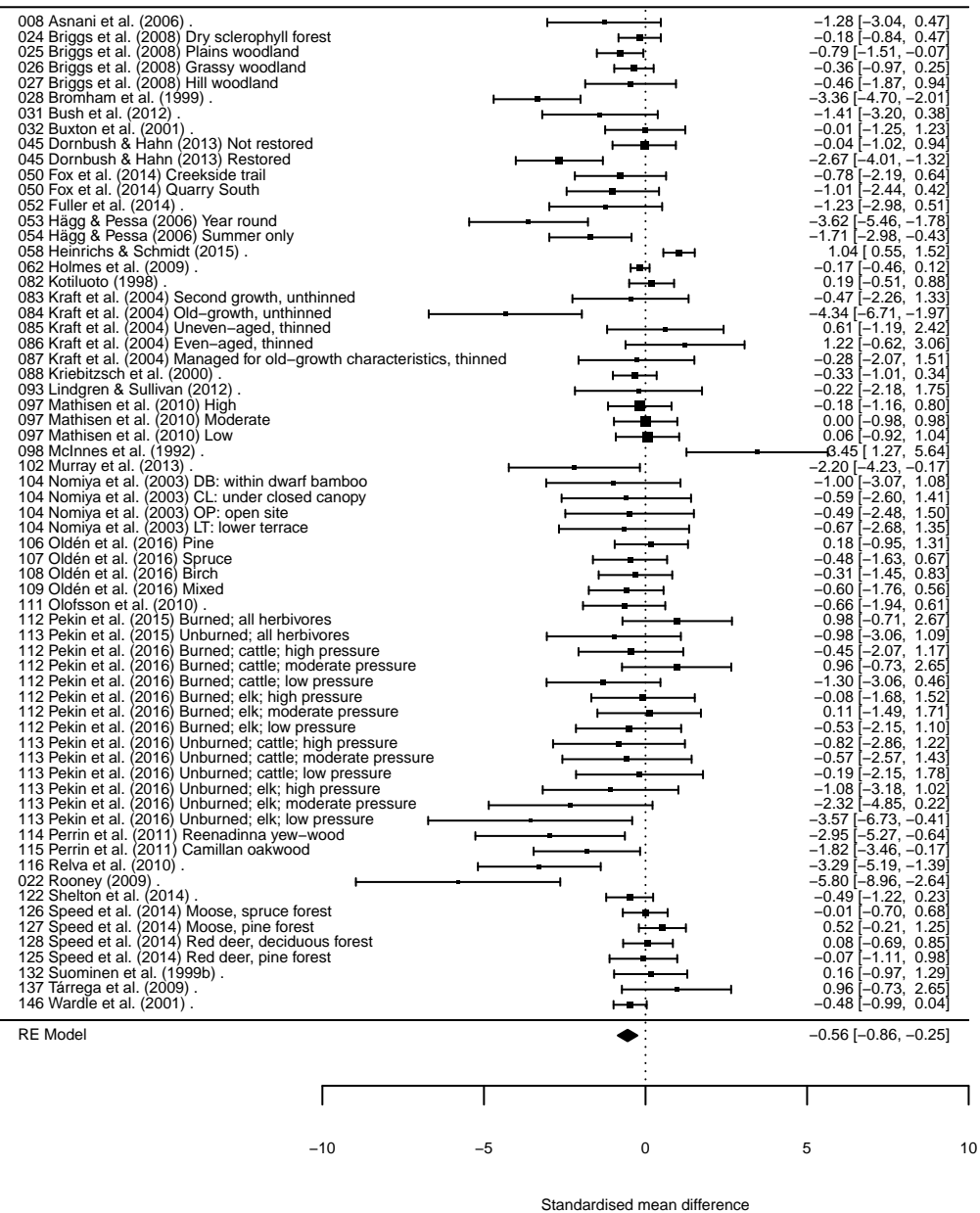
- 25-32 Influence of herbivore origin on vegetation abundance
- 33-38 Influence of herbivore origin on vegetation richness
- 39-40 Influence of herbivore feeding strategy on understorey abundance and richness
- 41-43 Influence of intervention type on understorey abundance and richness
- 44-46 Influence of forest cover type on understorey abundance
- 47-49 Influence of forest cover type on understorey understorey richness
- 50-52 Influence of palatability (best estimate) on sapling abundance
- 53-55 Influence of palatability (highest estimate) on sapling abundance

### Effects on invertebrates

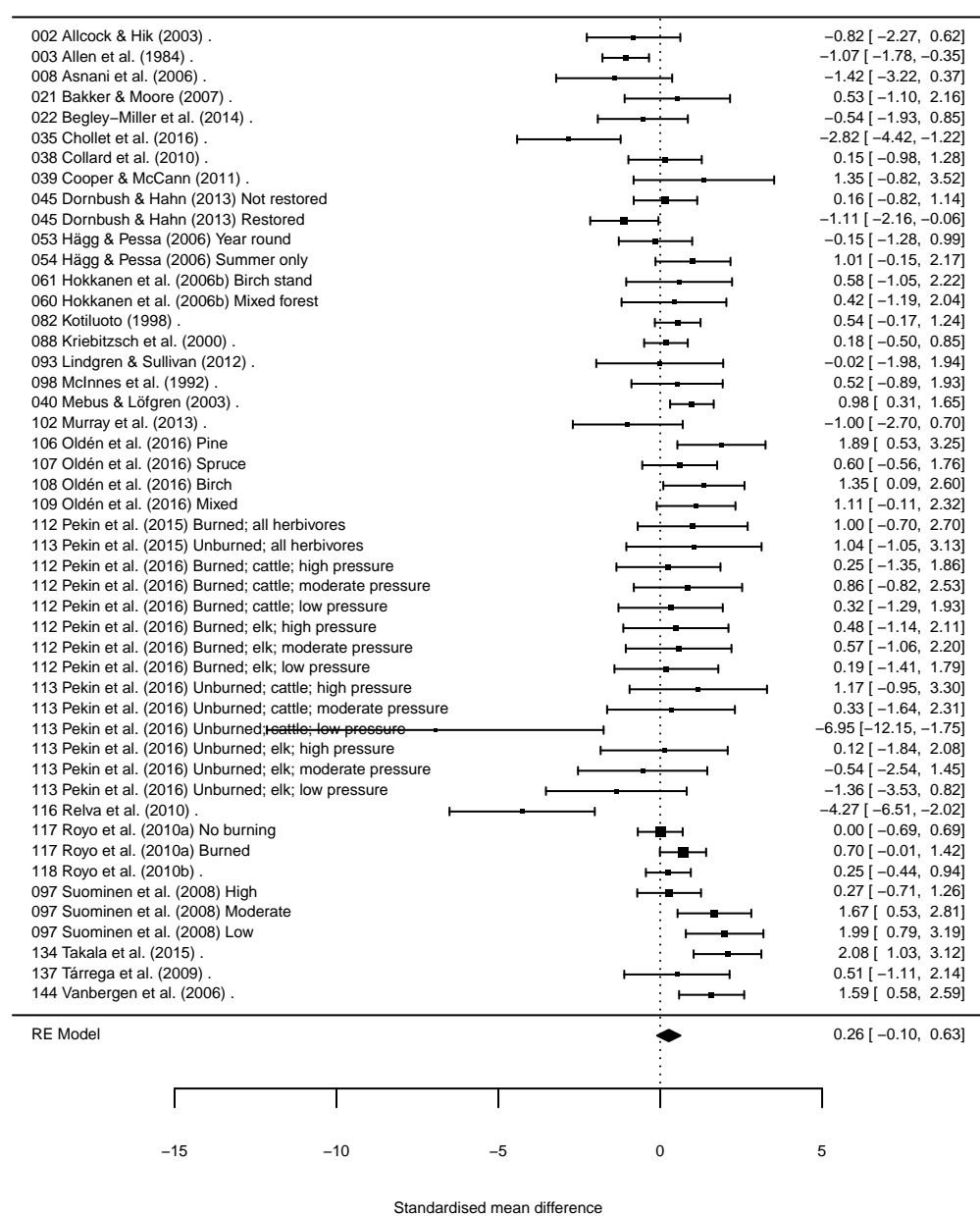
- 56-58 Abundance and species richness of lepidopterans, spiders and carabids

Individual results in the forest plots are identified by site ID followed by study citation, plus a description where several results are reported by a single study. The figures at the right-hand side of the forest plots show mean SMD effect sizes, with 95% confidence intervals in square brackets.

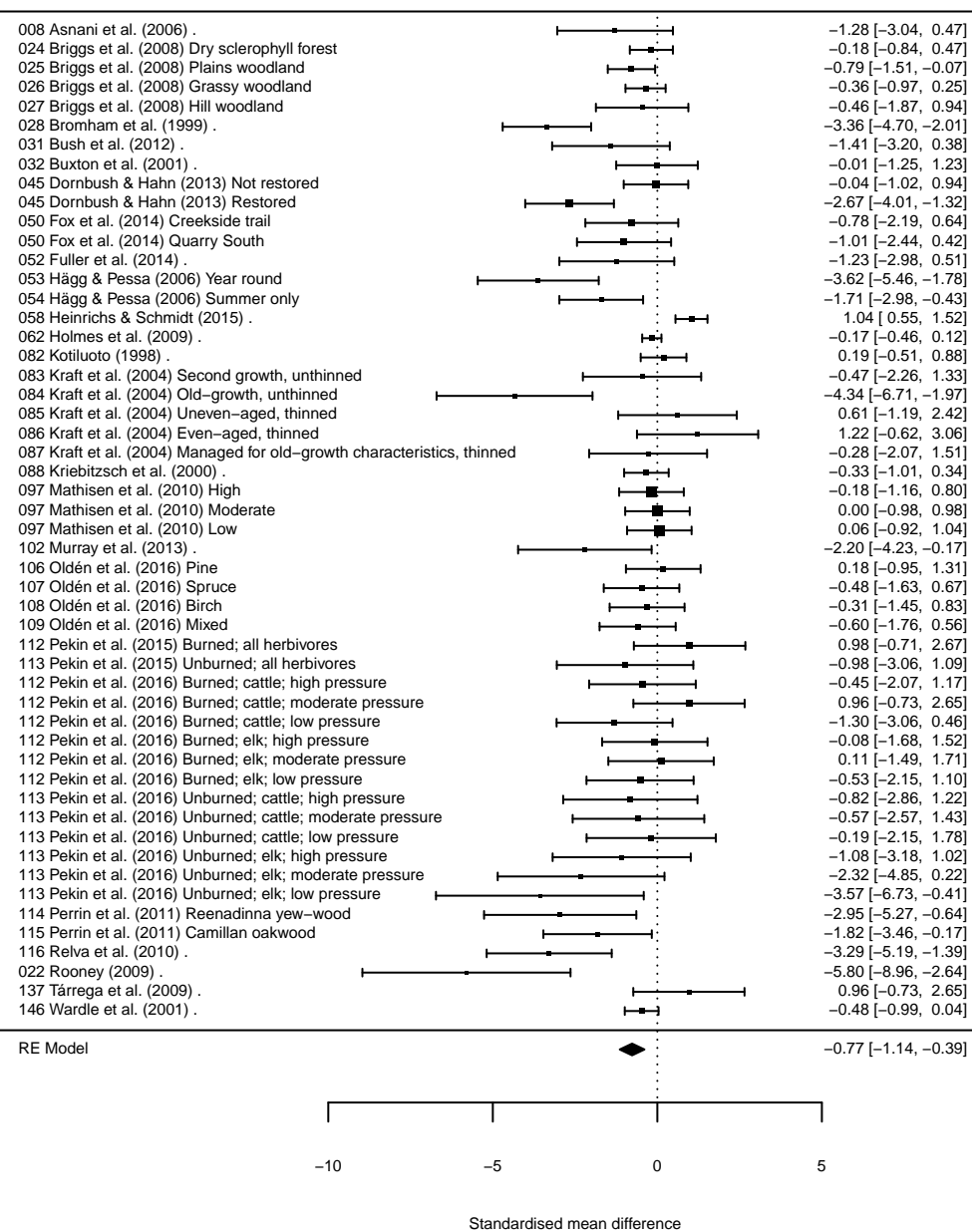
## Understorey abundance



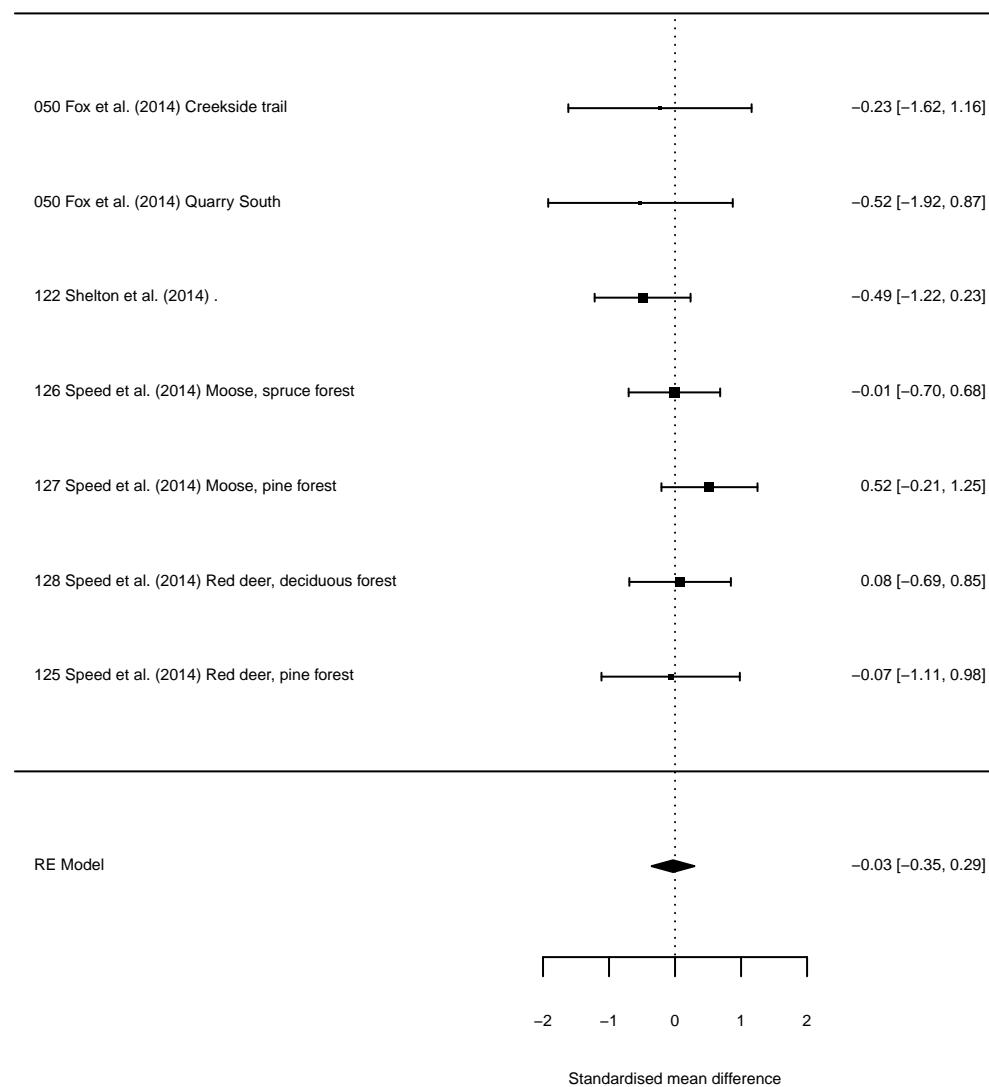
## Understorey species richness



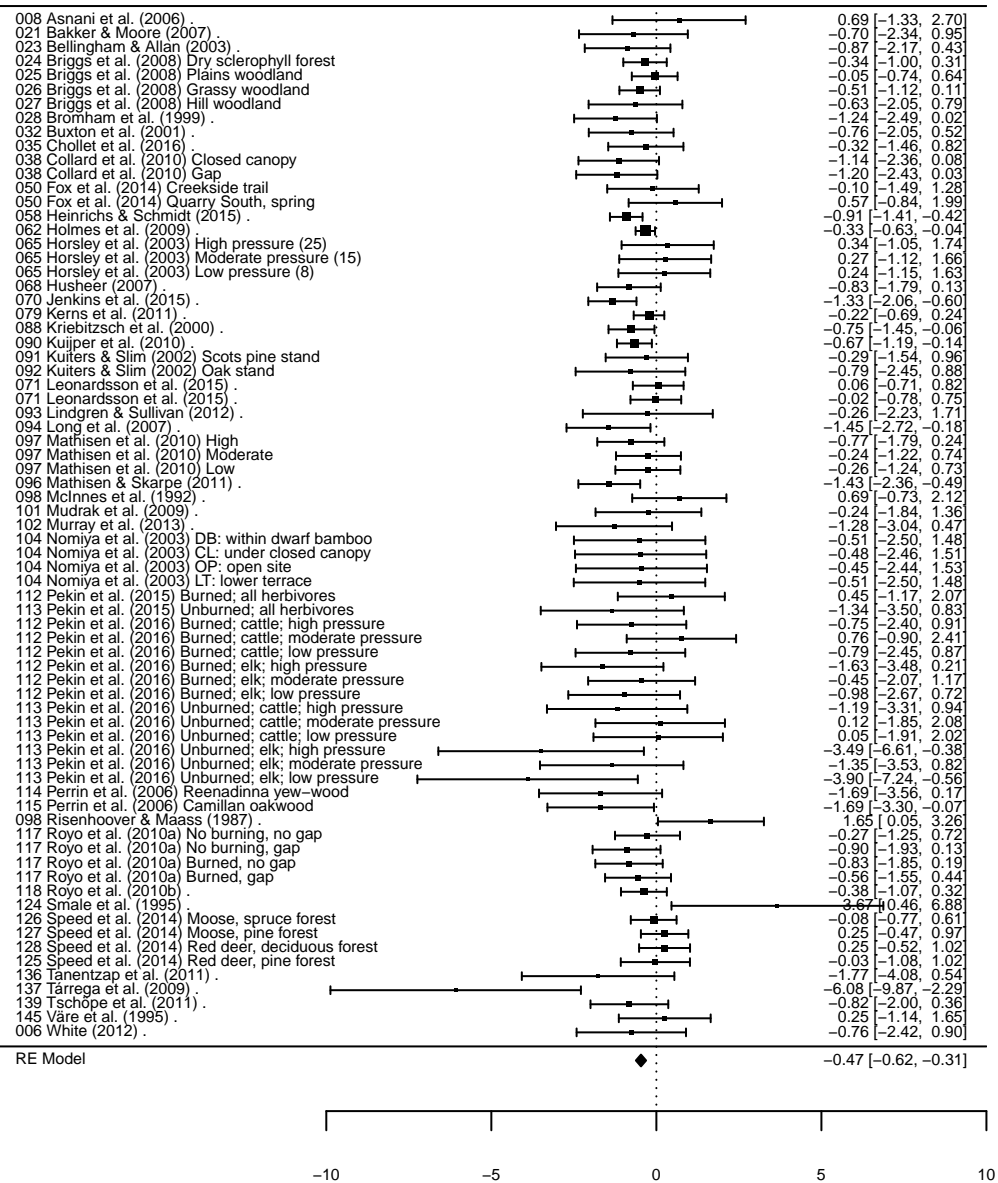
## Understorey abundance measured as cover



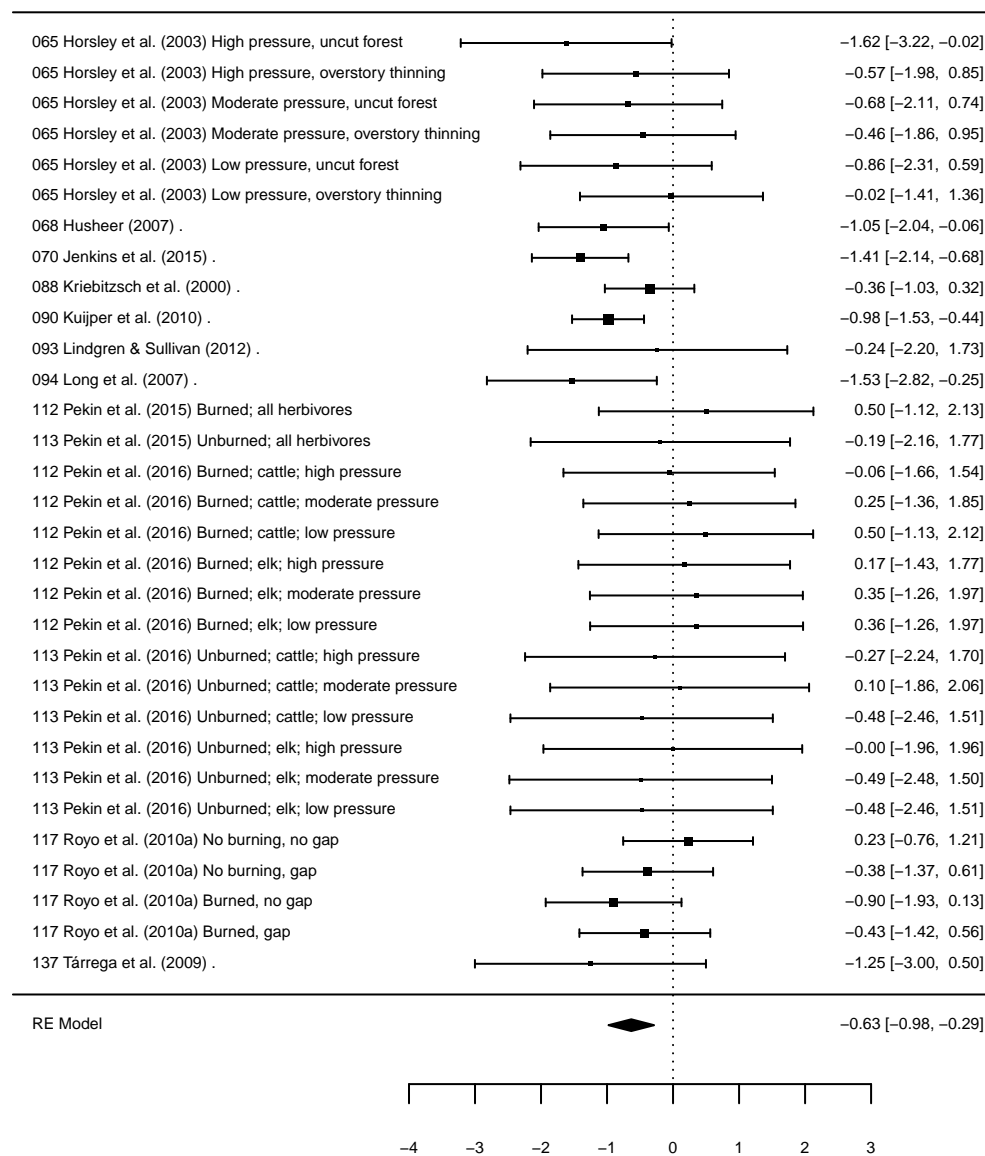
## Understorey abundance measured as stem density



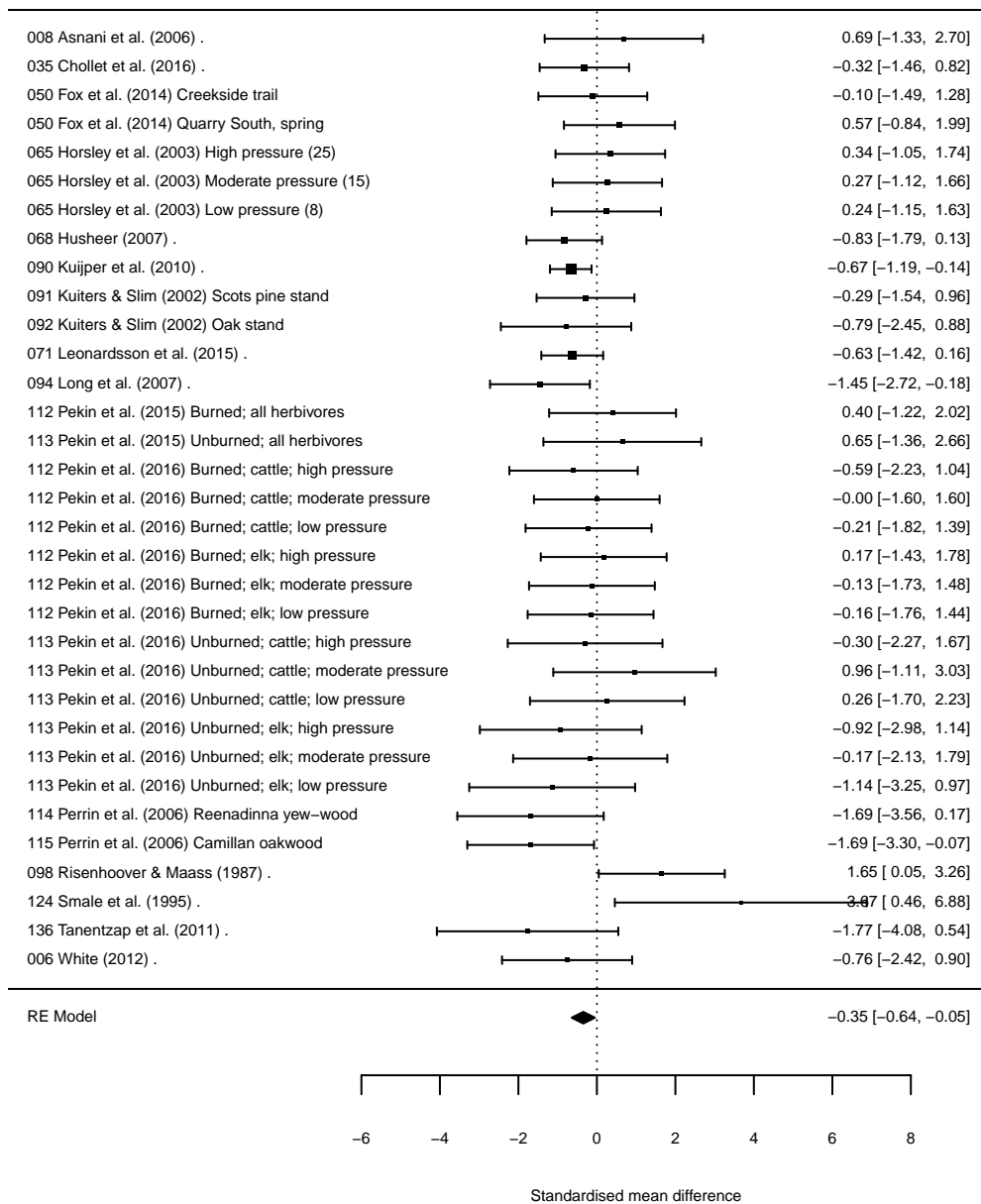
## Woody species abundance



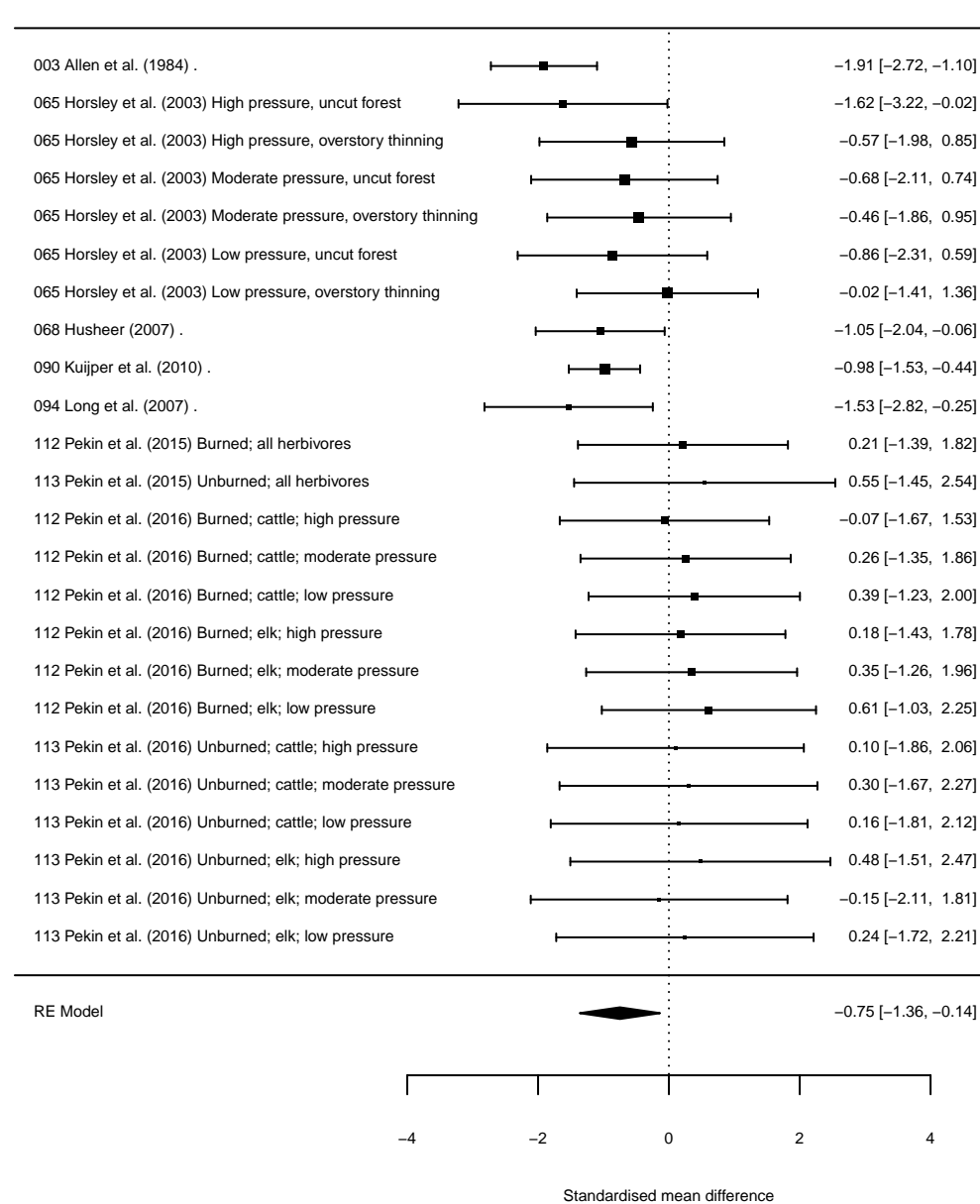
## Woody species richness



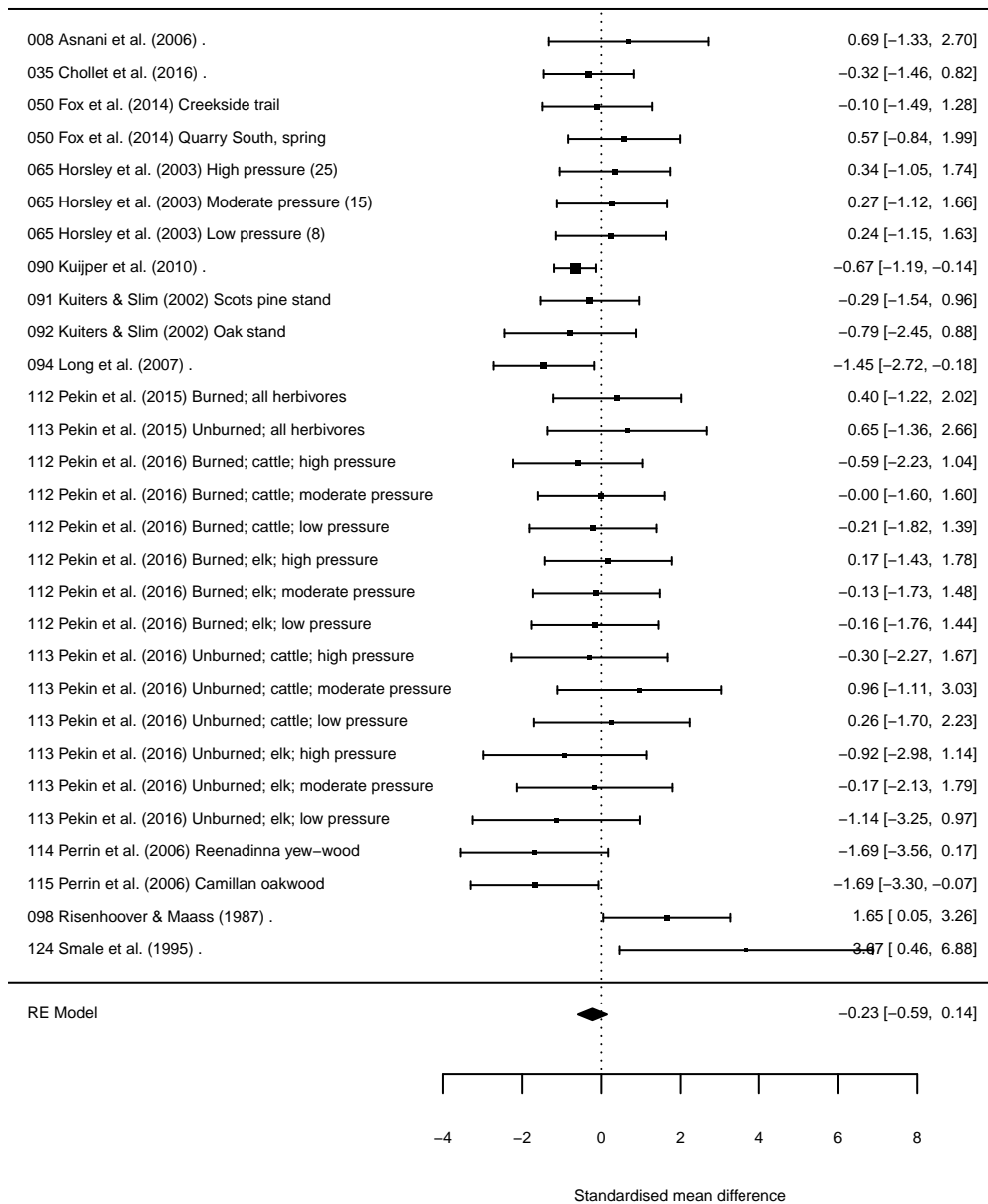
## Sapling abundance



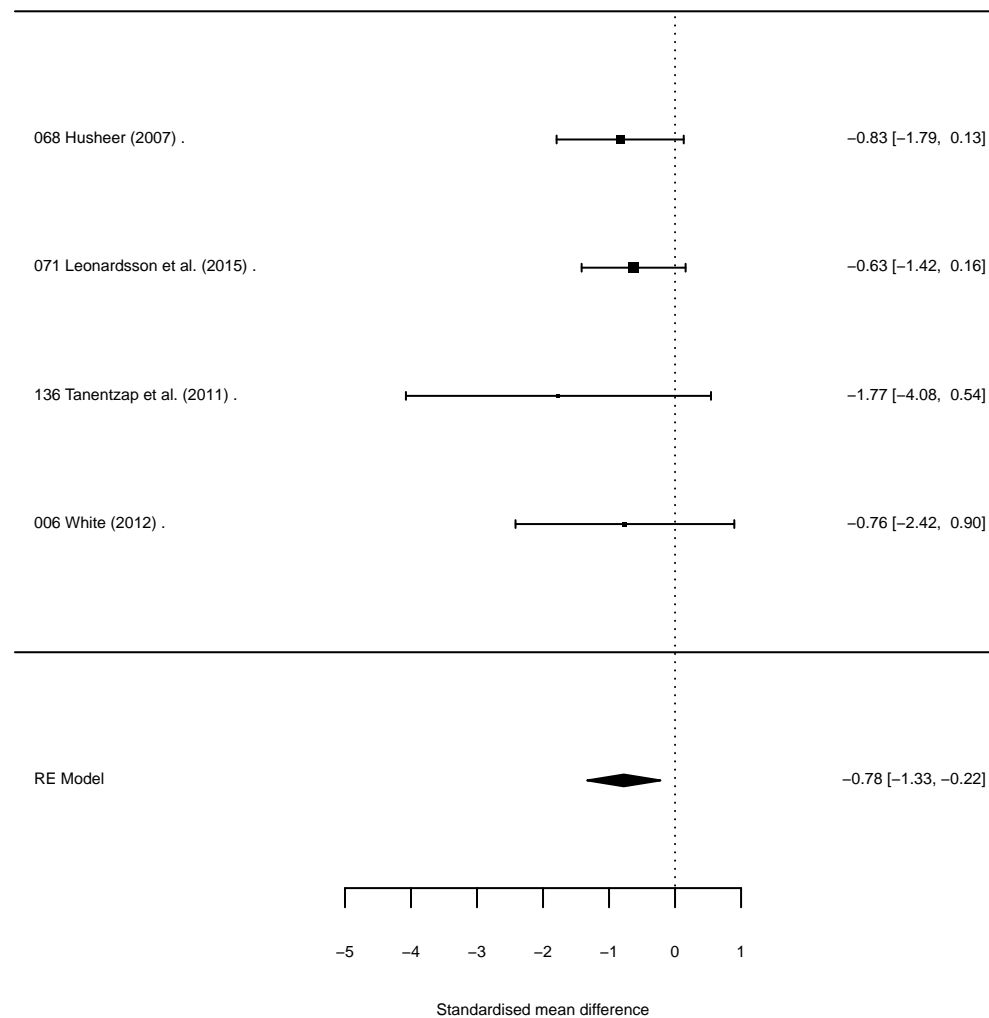
## Sapling species richness



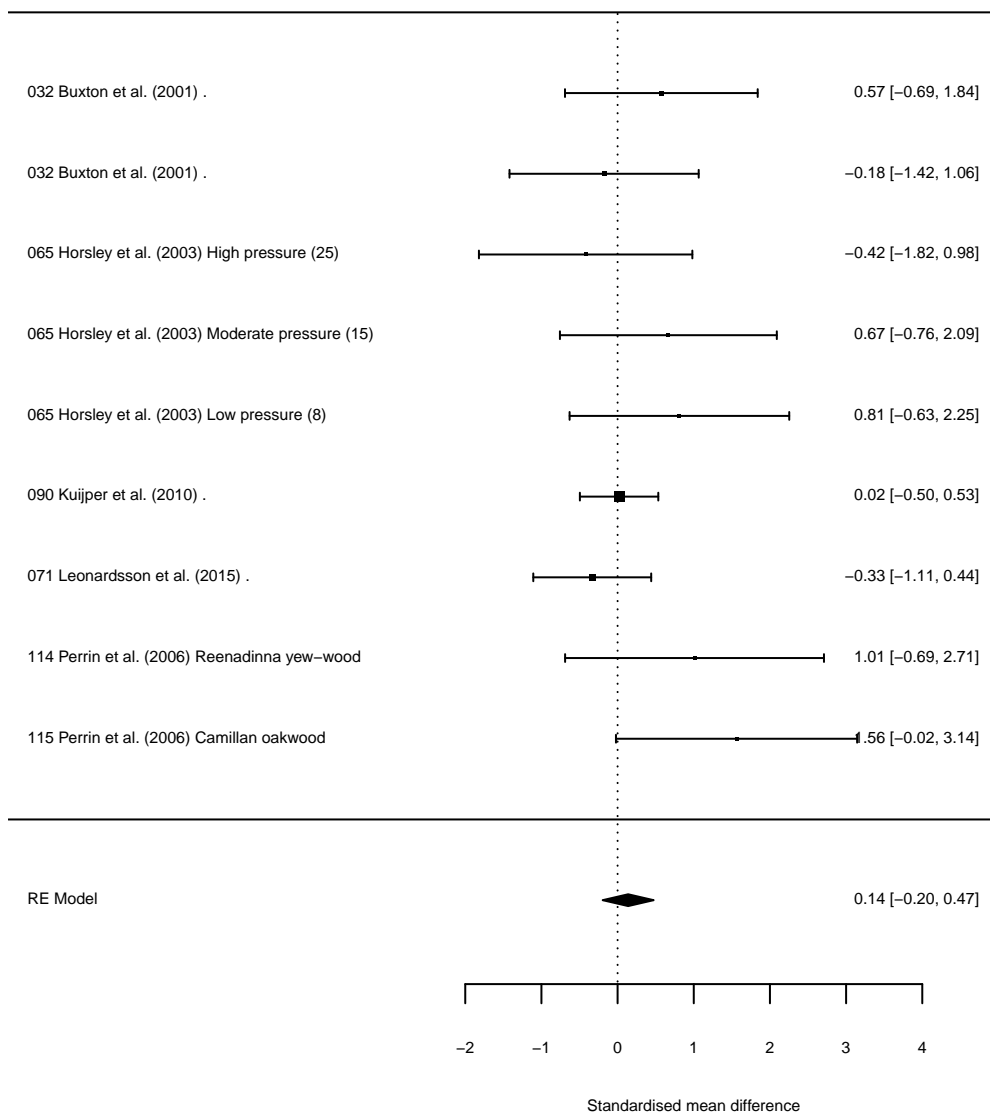
## Abundance of unspecified seedlings/saplings



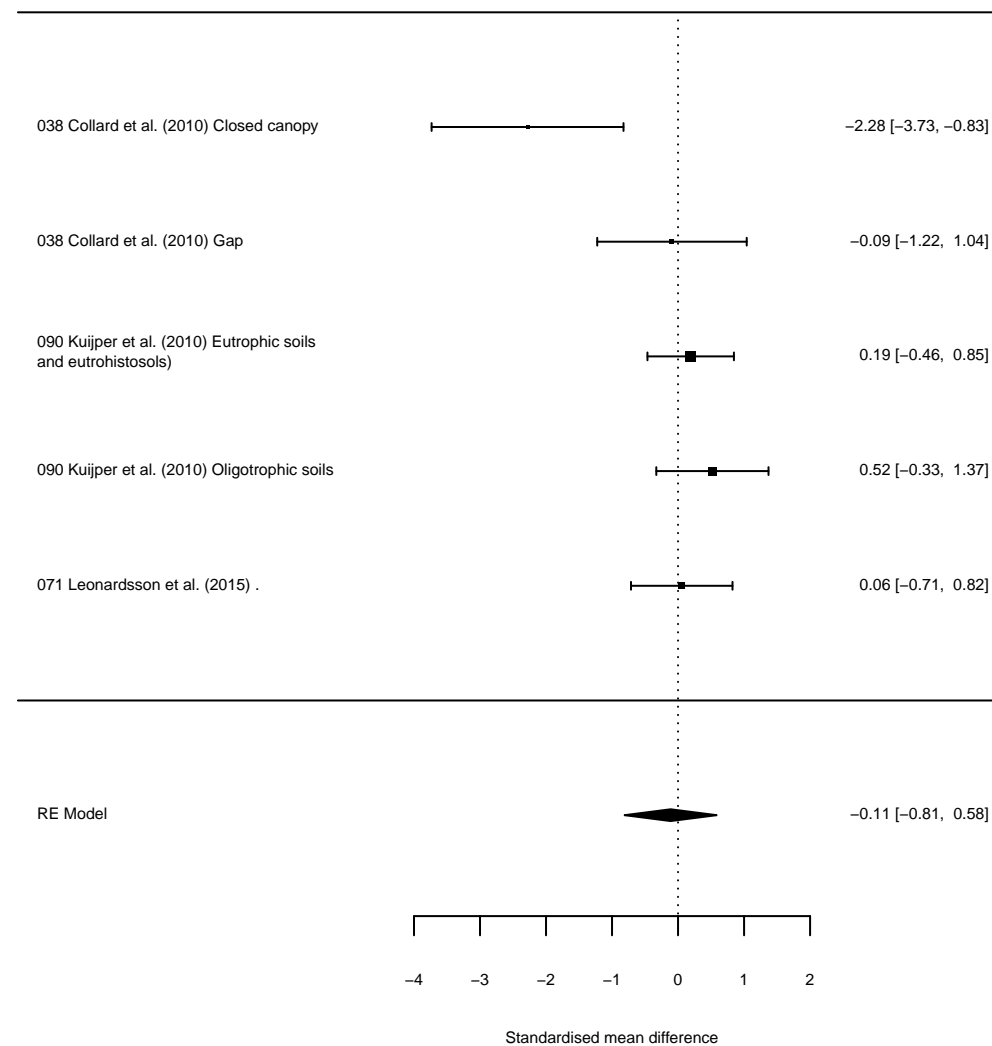
## Abundance of saplings only



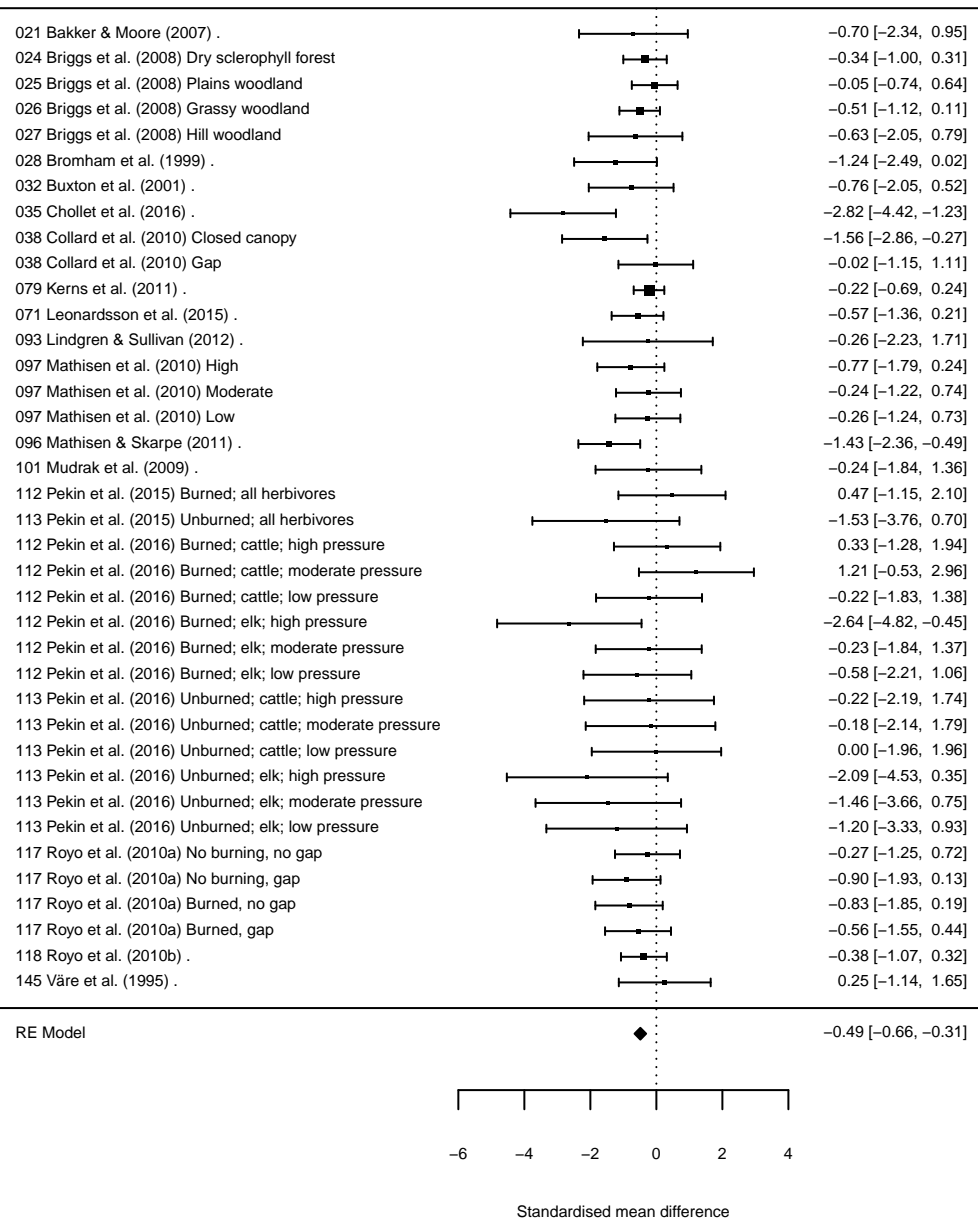
## Abundance of small seedlings



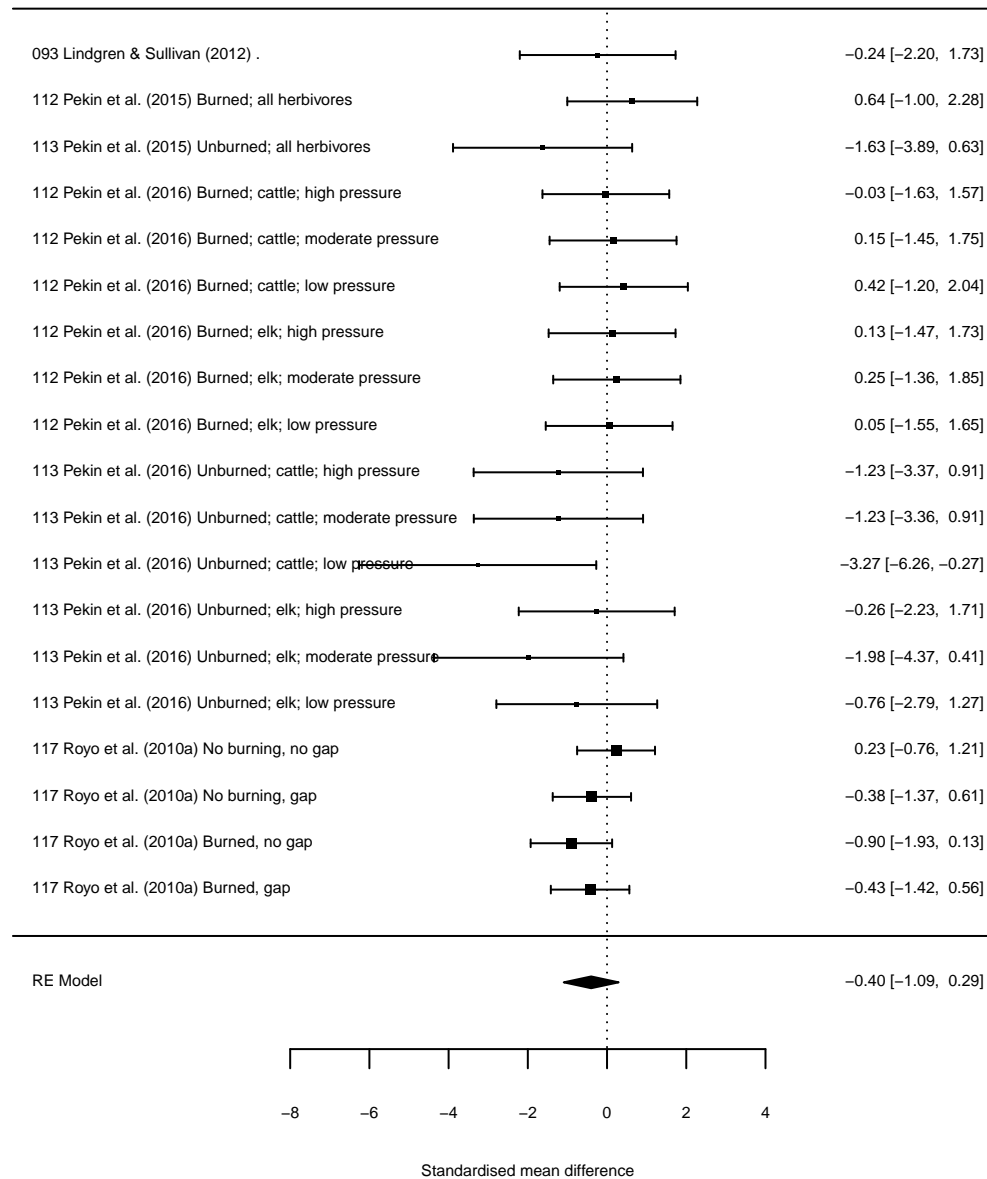
## Abundance of larger seedlings



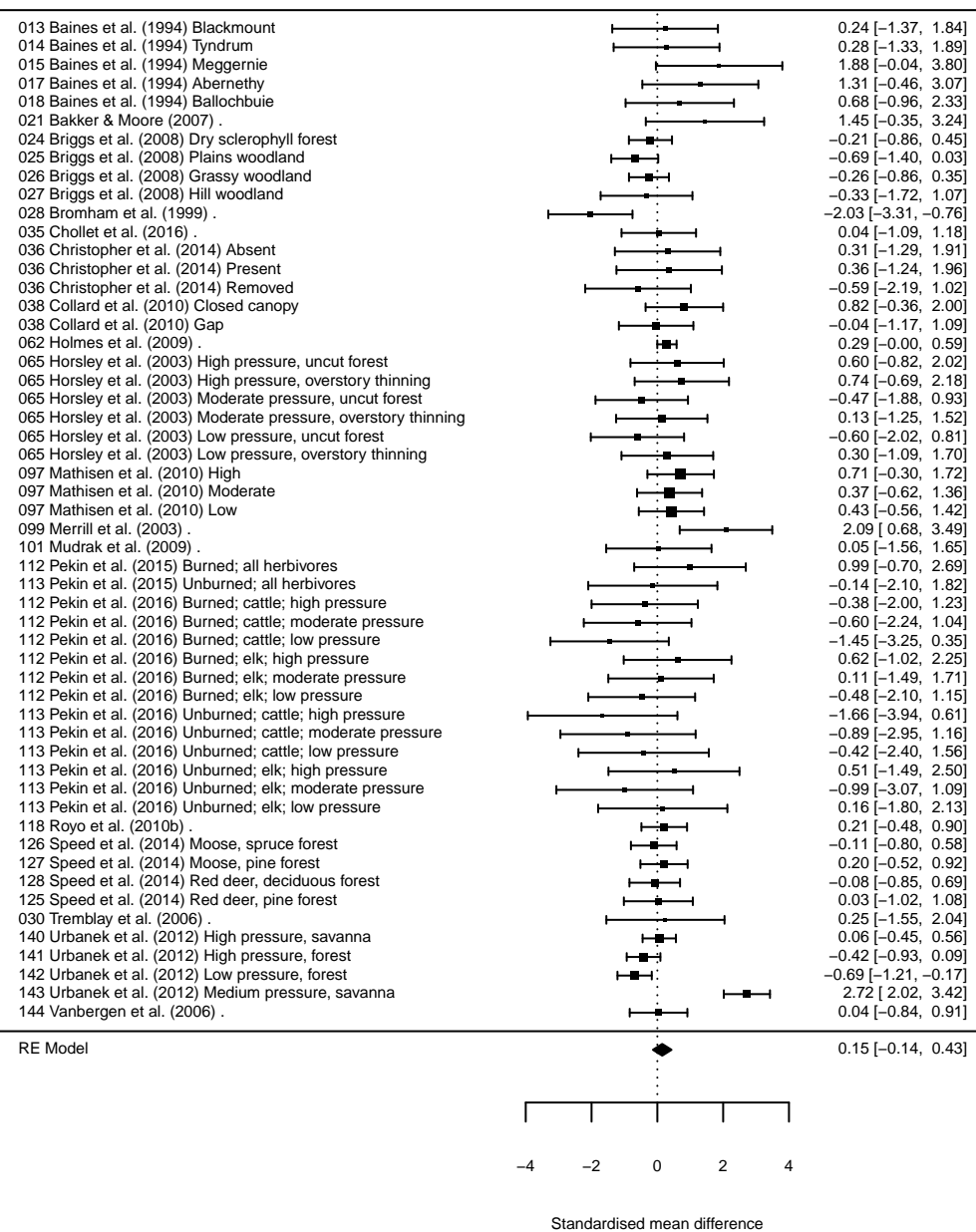
## Shrub abundance



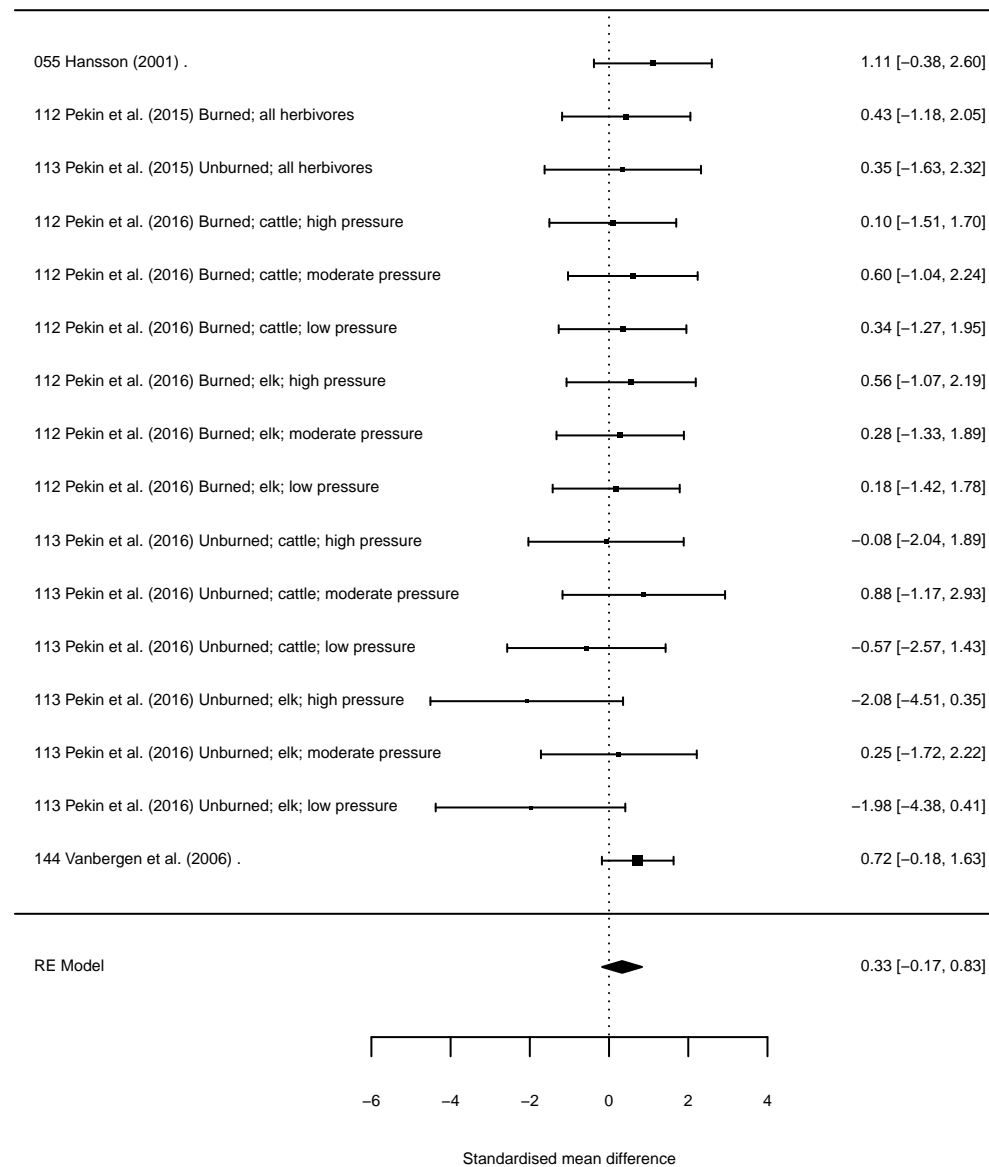
## Shrub species richness



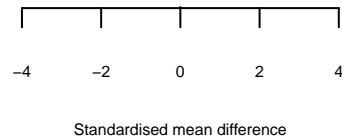
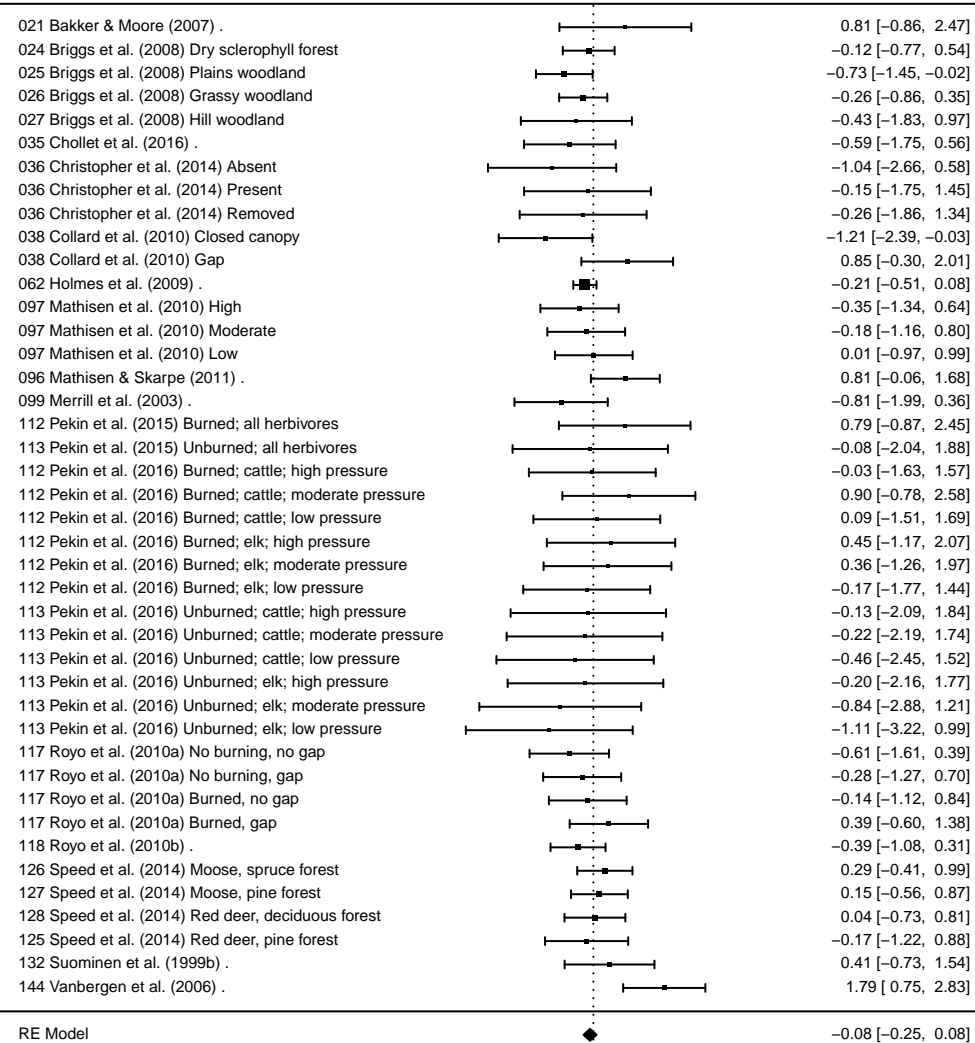
## Graminoid abundance



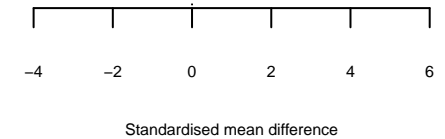
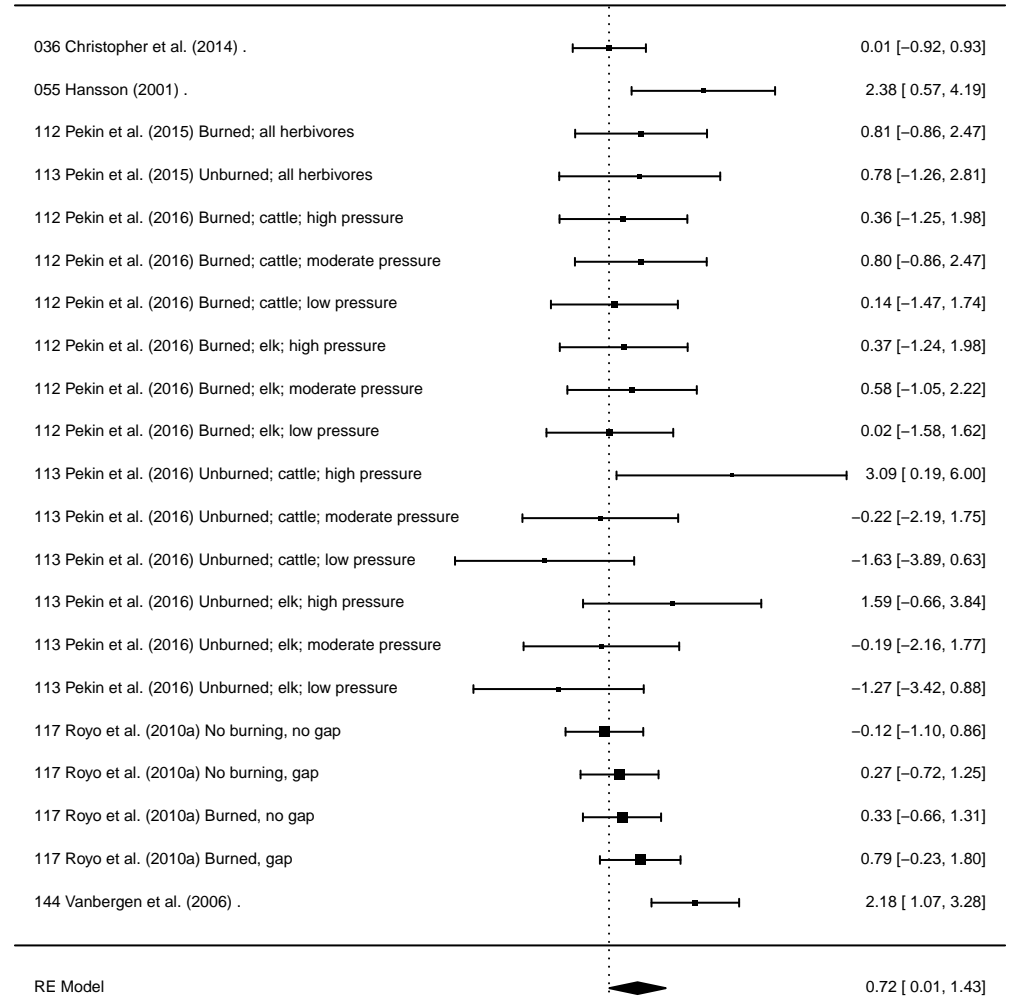
## Graminoid species richness



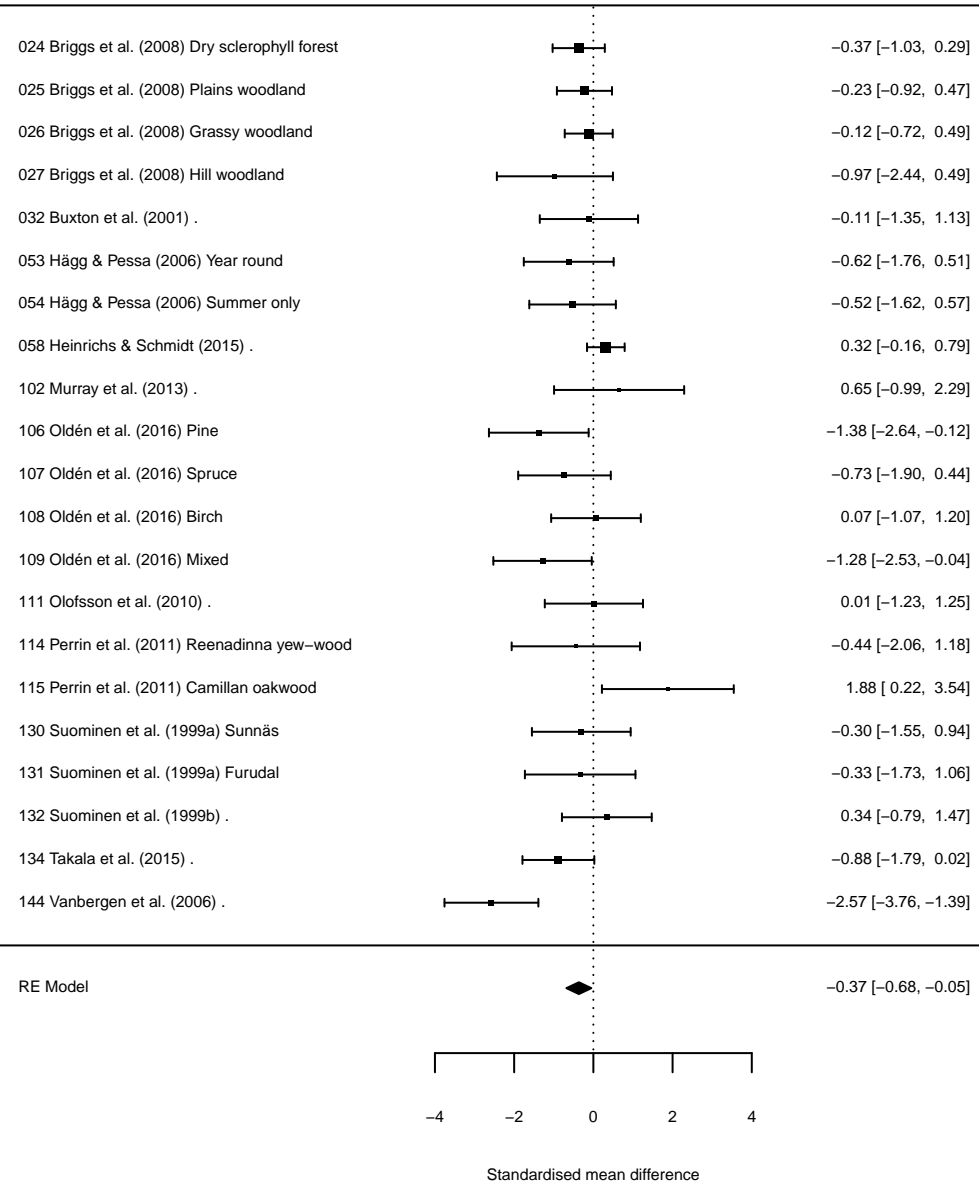
### Forb abundance



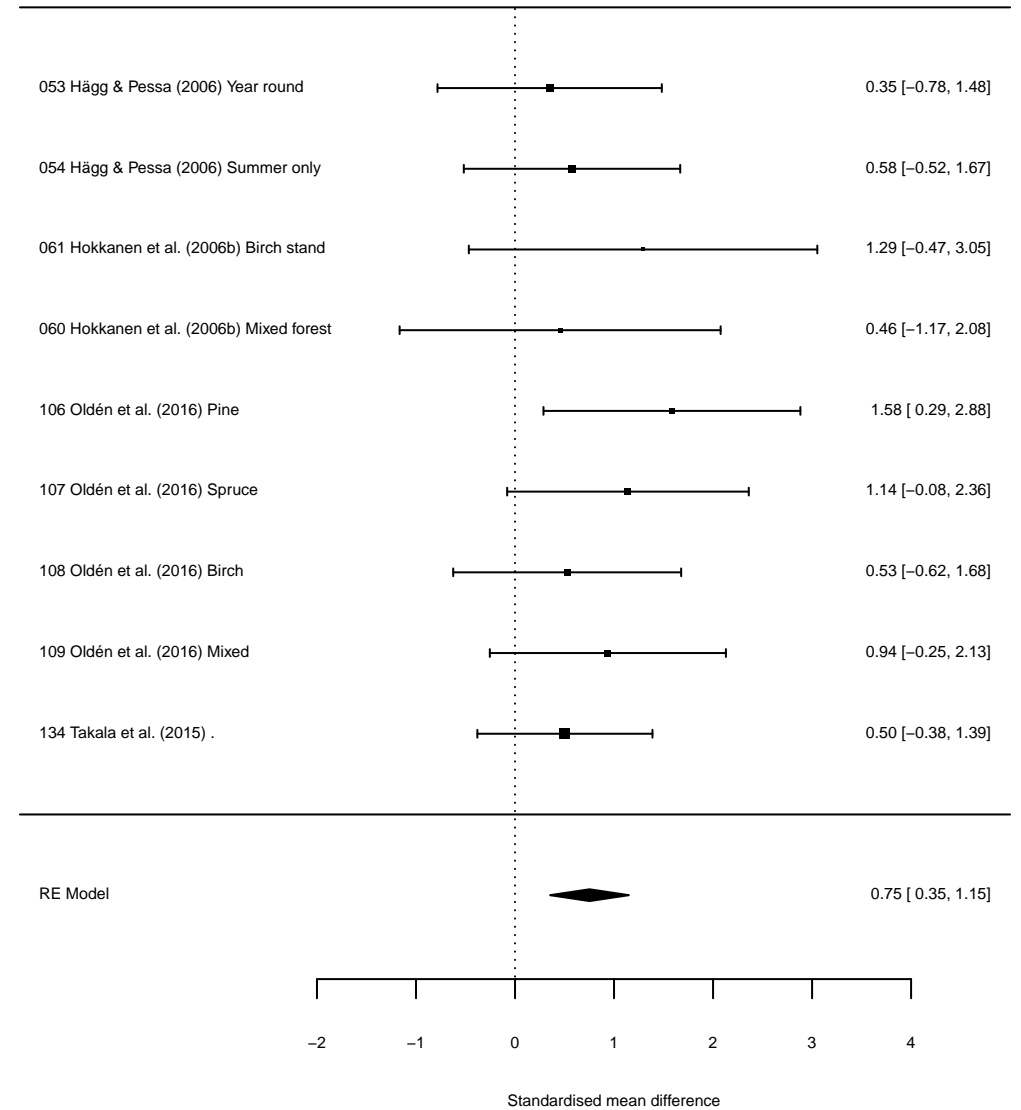
### Forb species richness



## Bryophyte abundance



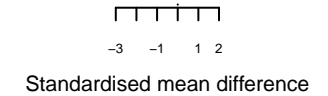
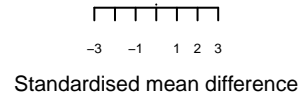
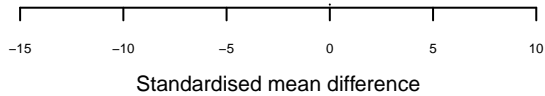
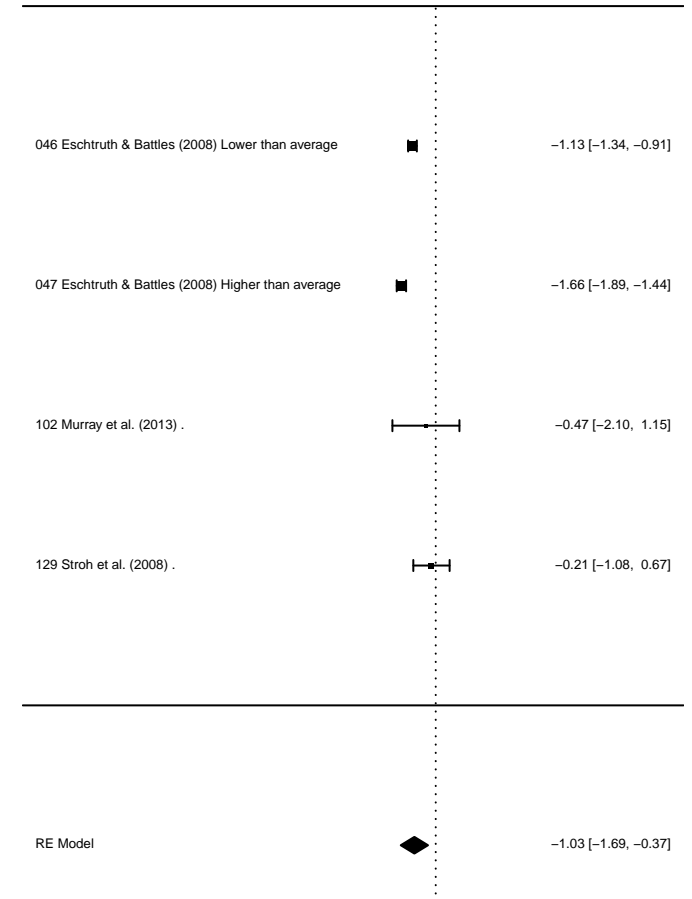
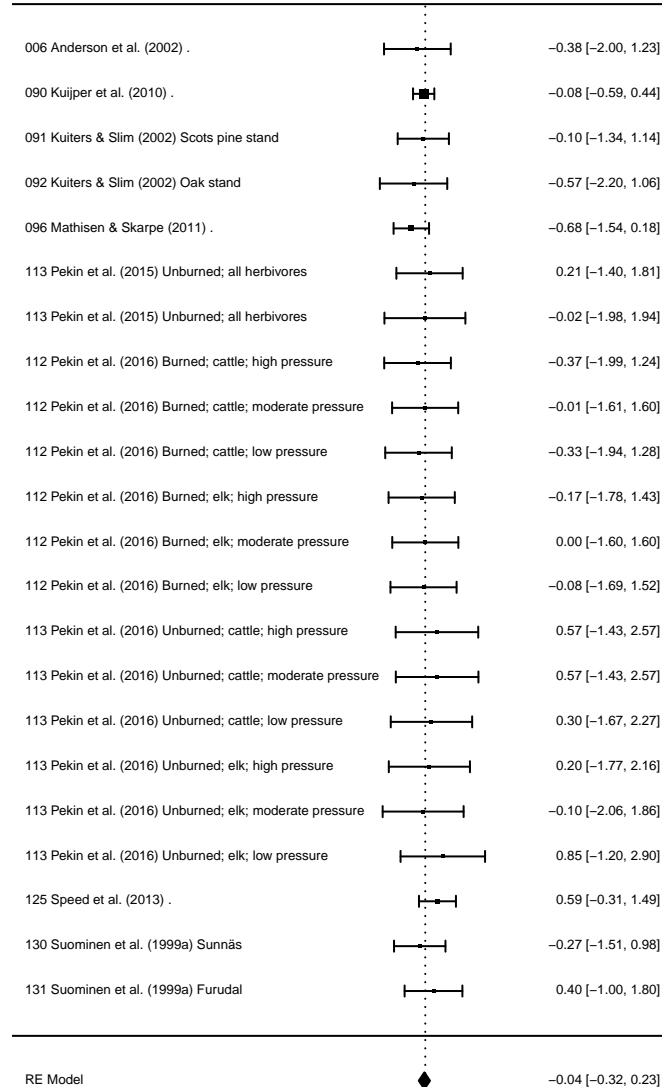
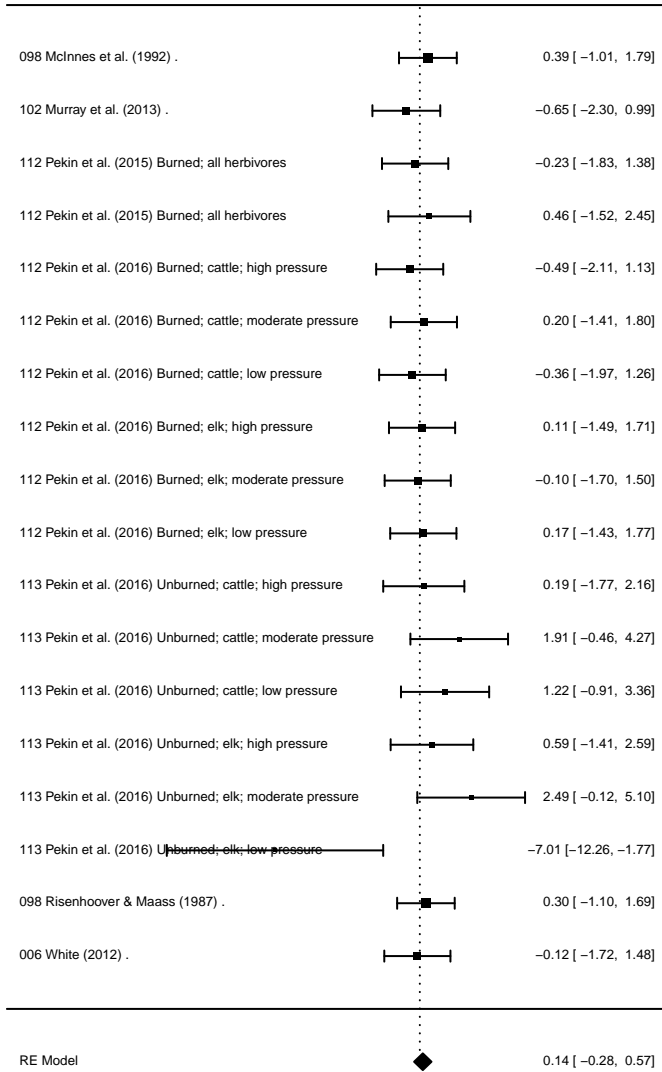
## Bryophyte species richness



### Abundance of Abies seedlings/saplings

### Abundance of Pinus seedlings/saplings

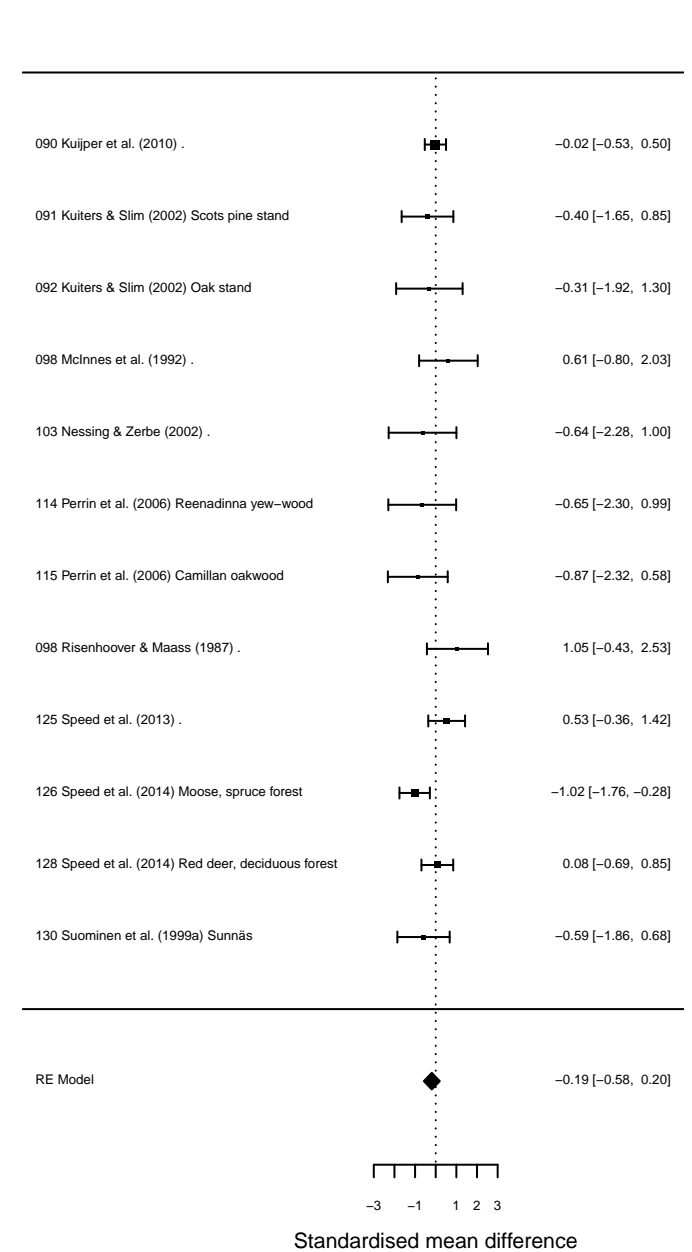
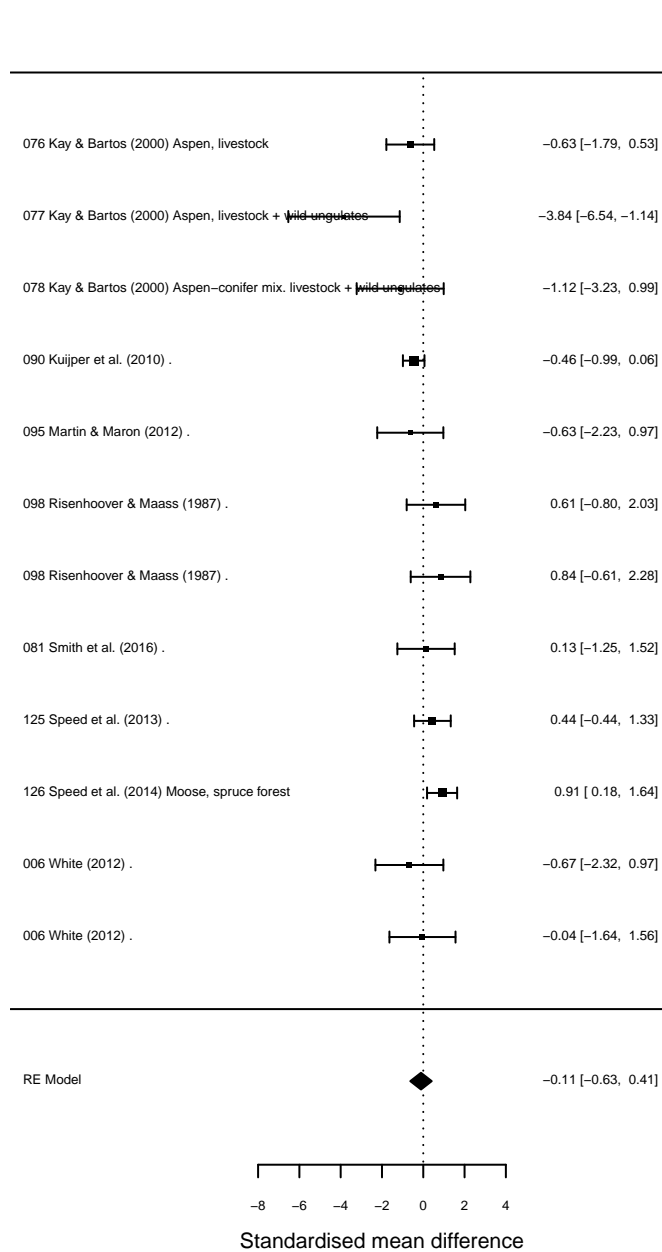
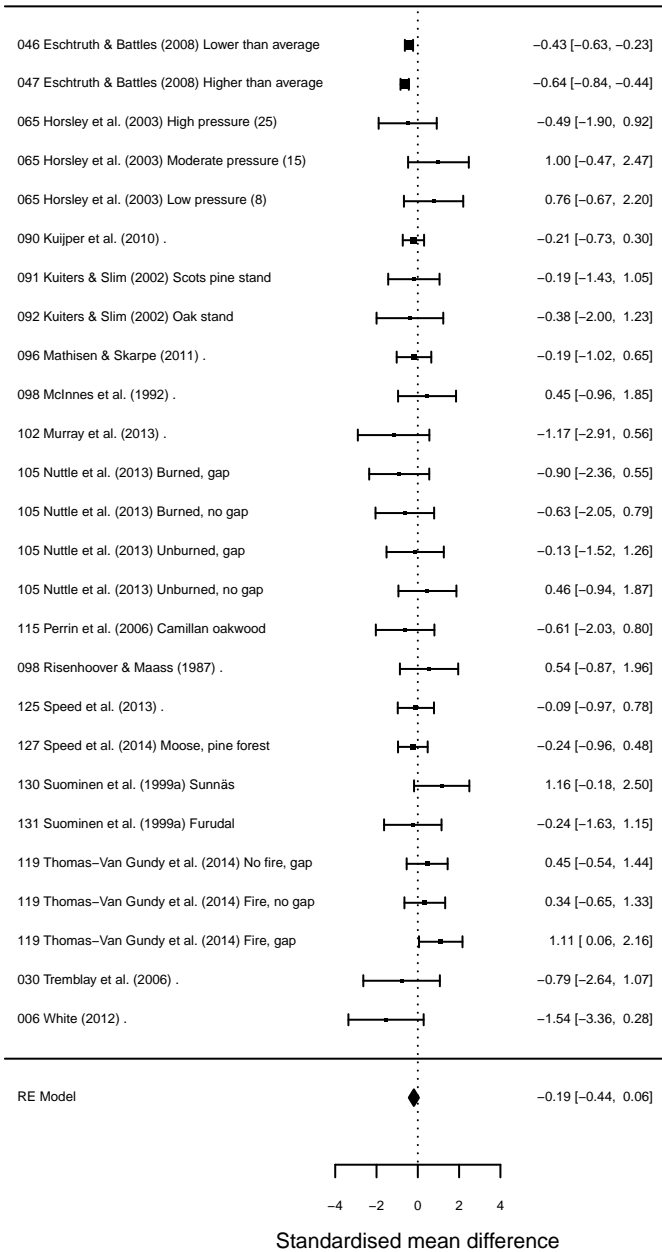
### Abundance of Tsuga seedlings/saplings



### Abundance of *Betula* seedlings/saplings

### Abundance of *Populus* seedlings/saplings

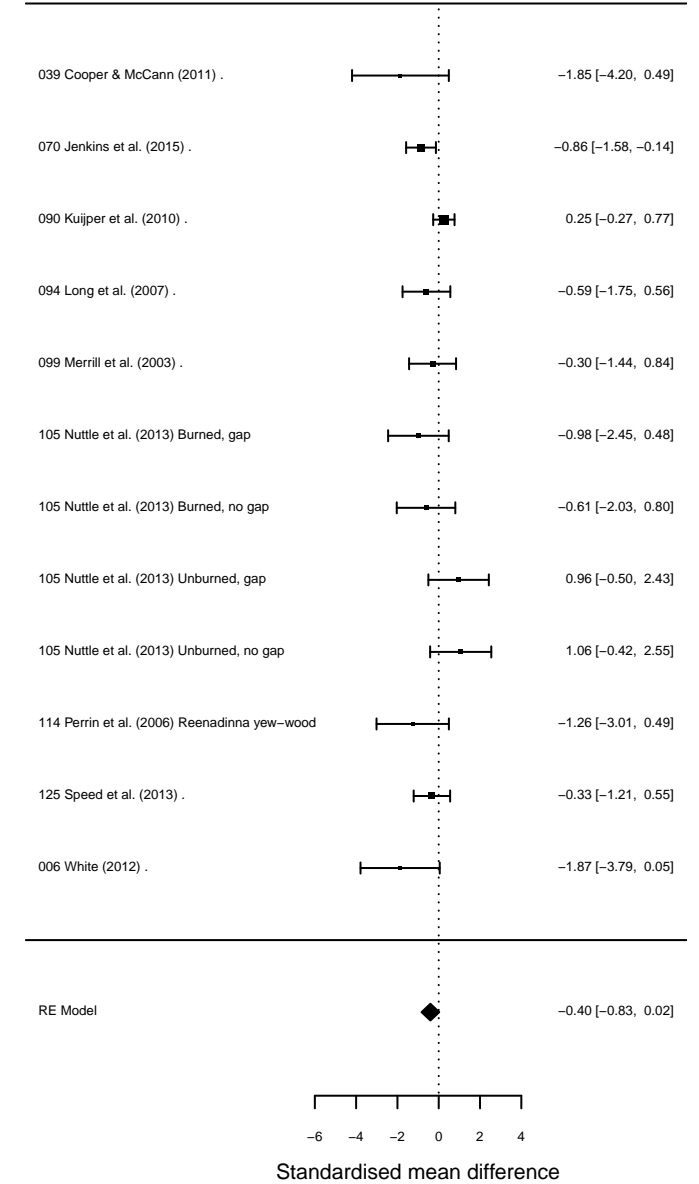
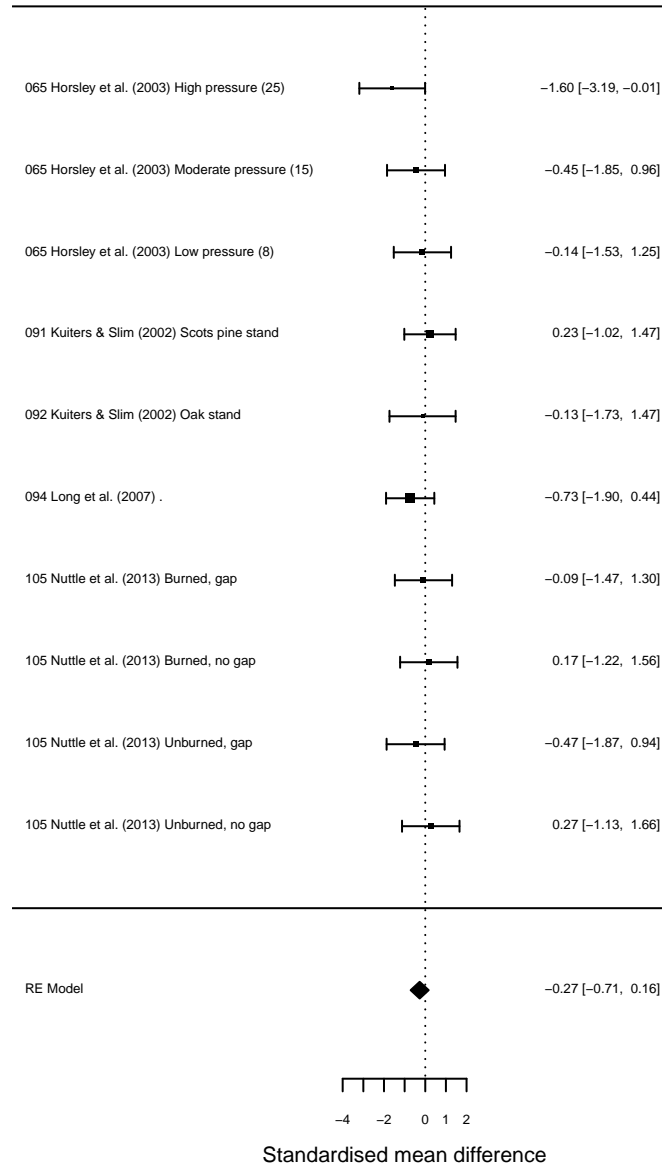
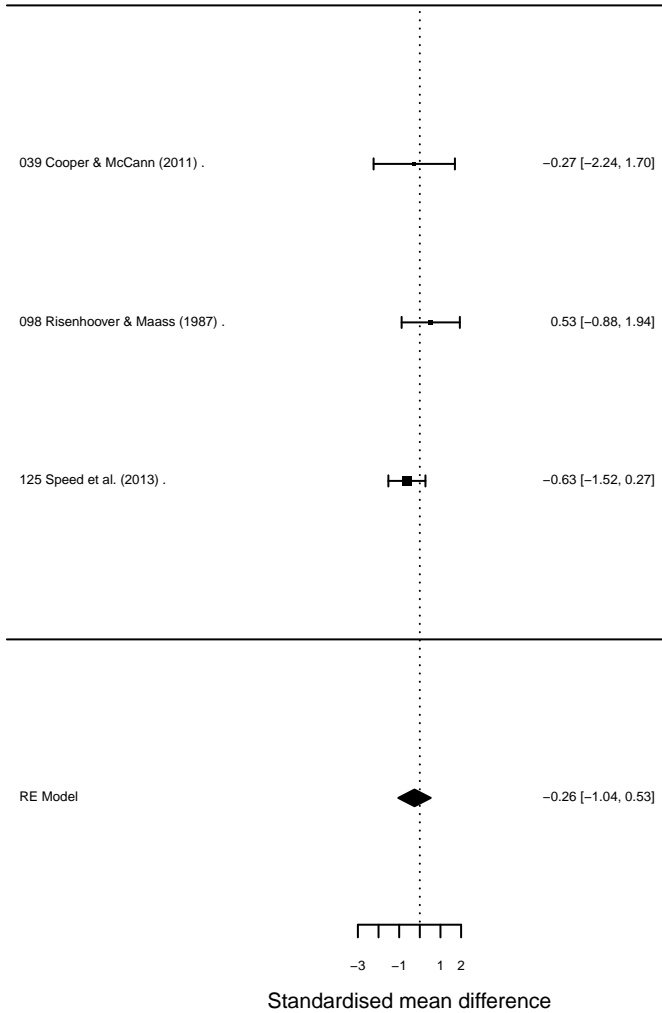
### Abundance of *Sorbus* seedlings/saplings



### Abundance of *Corylus* seedlings/saplings

### Abundance of *Fagus* seedlings/saplings

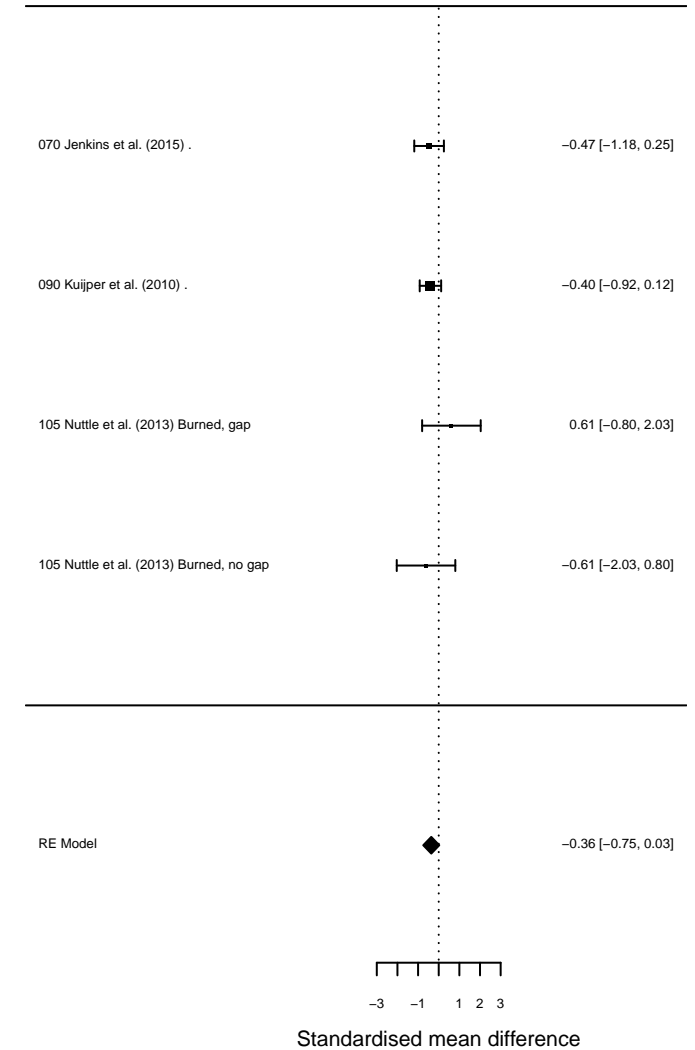
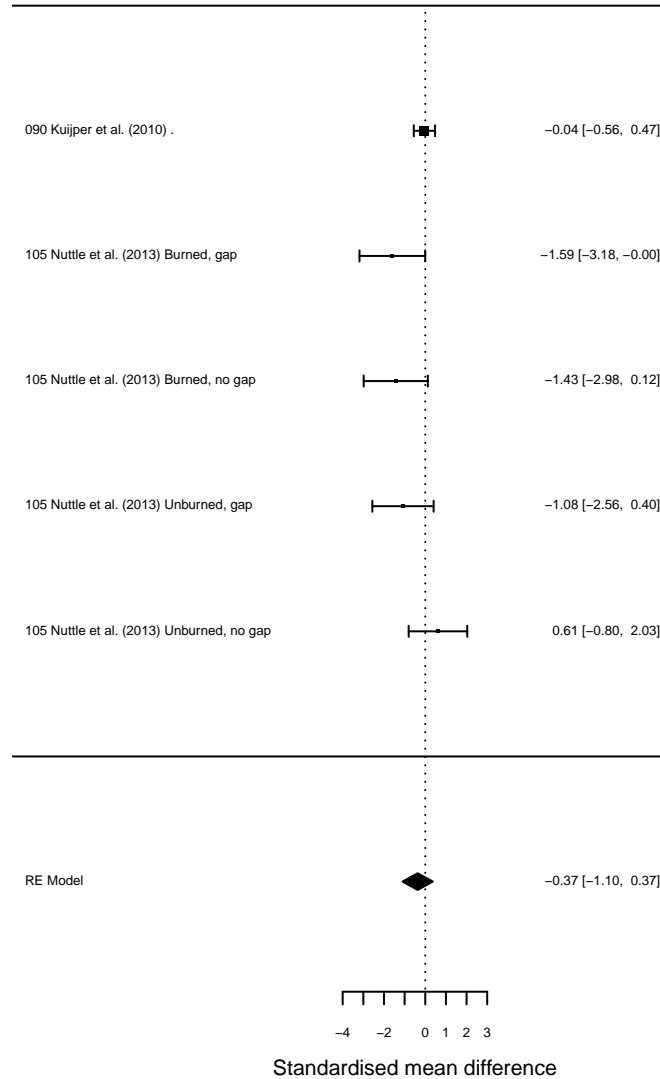
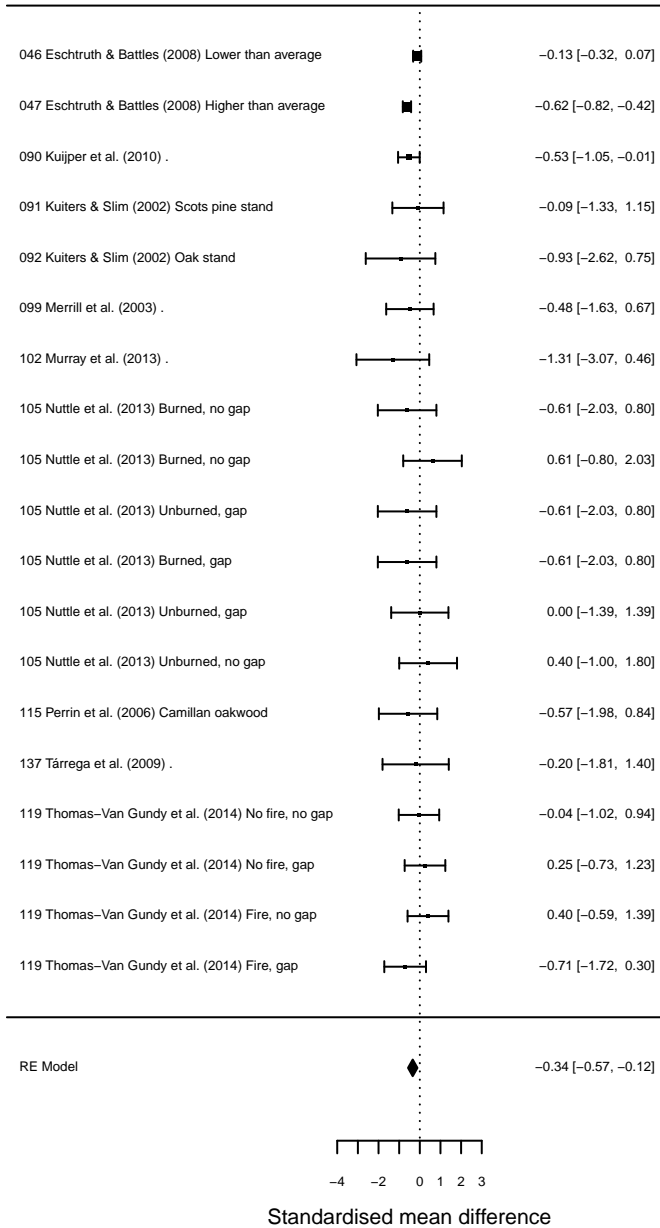
### Abundance of *Fraxinus* seedlings/saplings



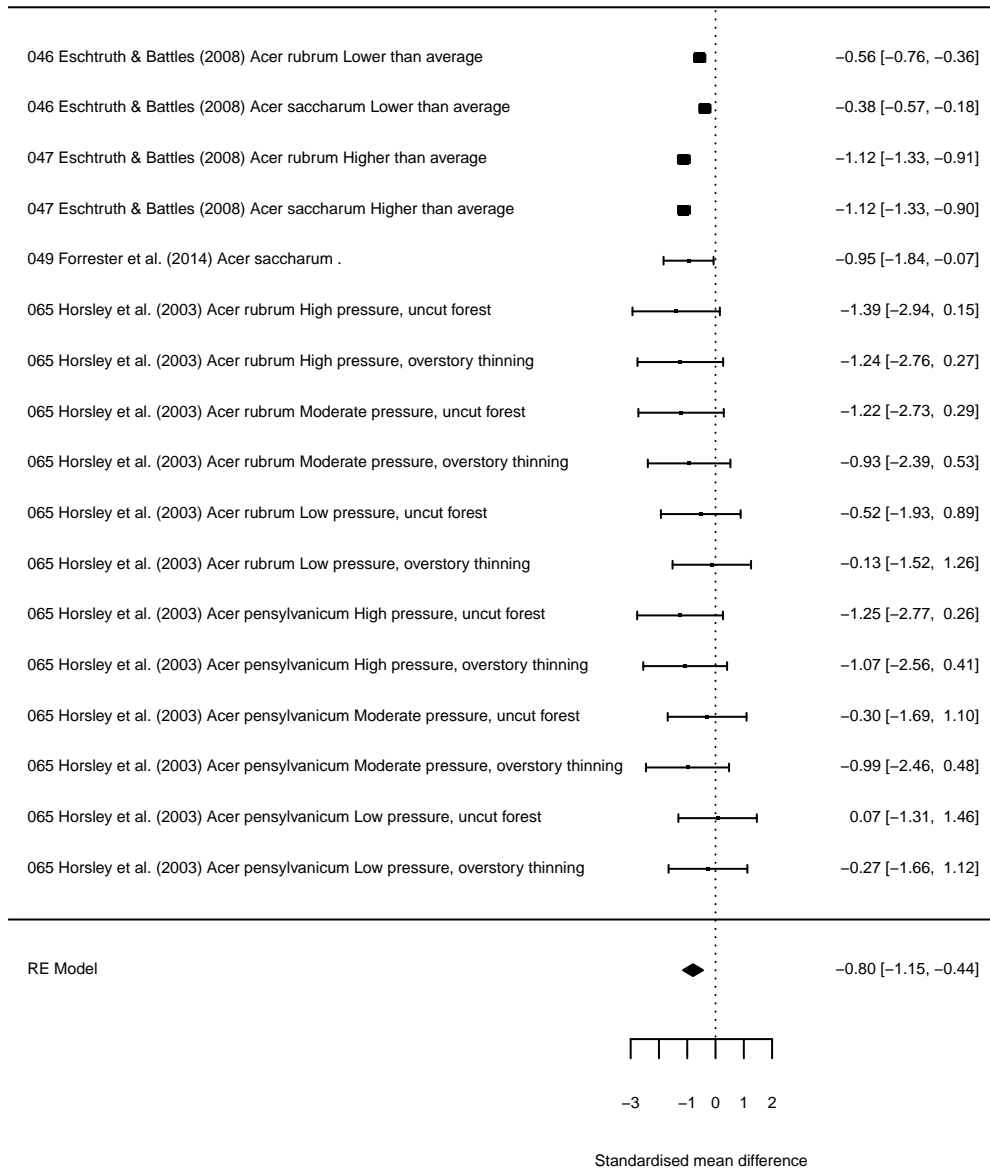
### Abundance of Quercus seedlings/saplings

### Abundance of Tilia seedlings/saplings

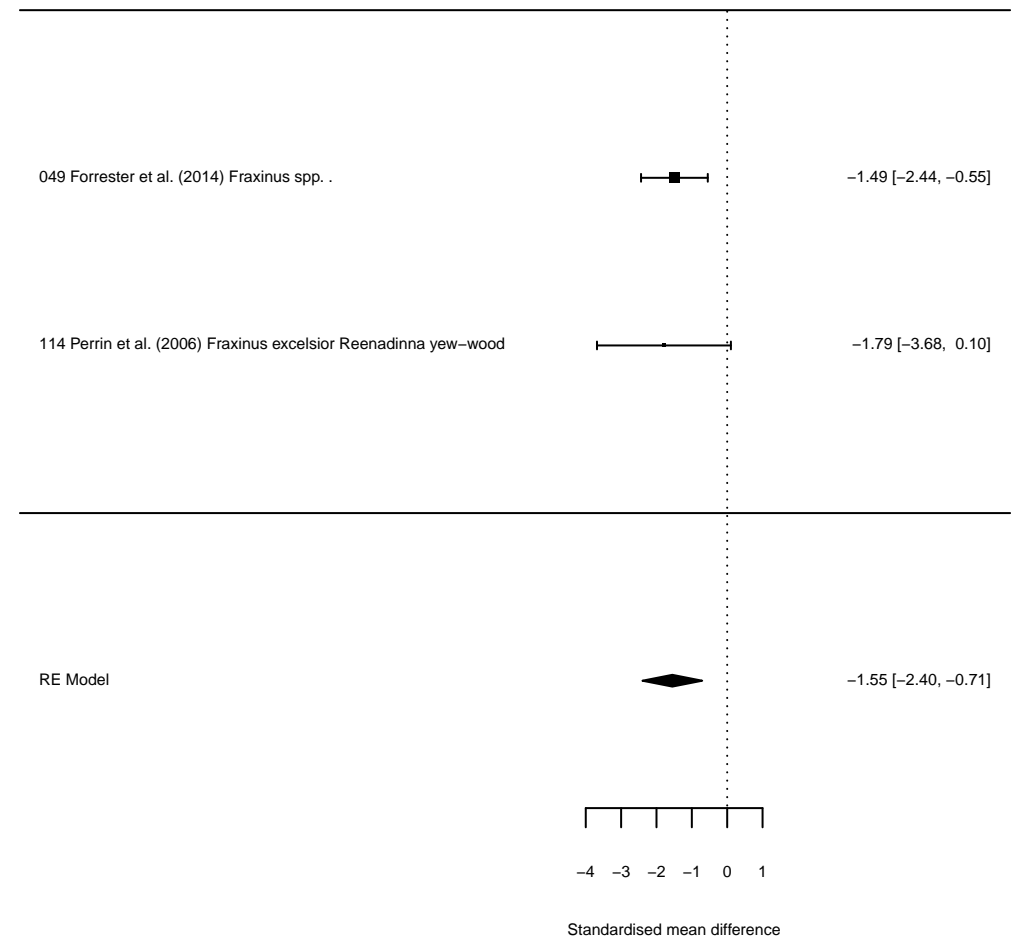
### Abundance of Ulmus seedlings/saplings



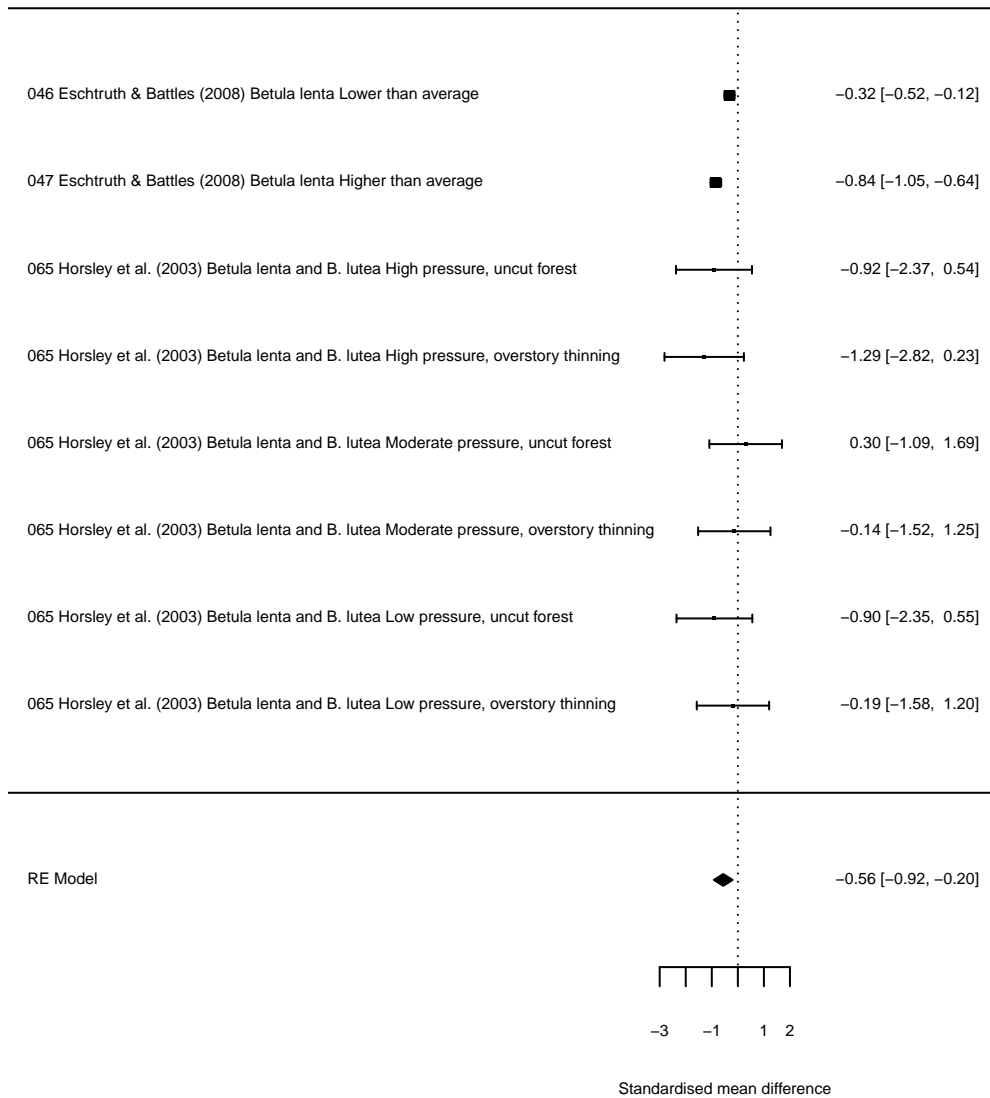
## Height of Acer seedlings/saplings



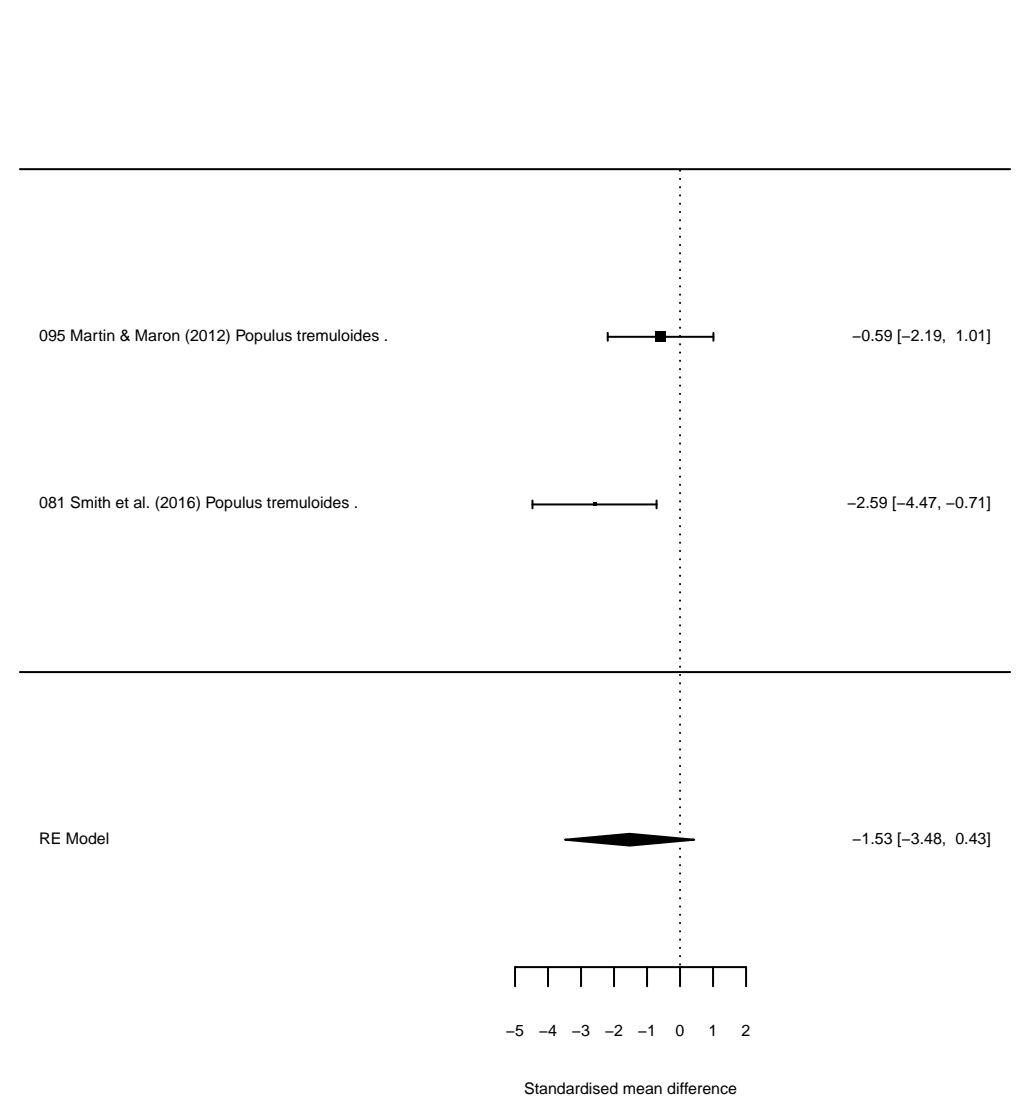
## Height of Fraxinus seedlings/saplings



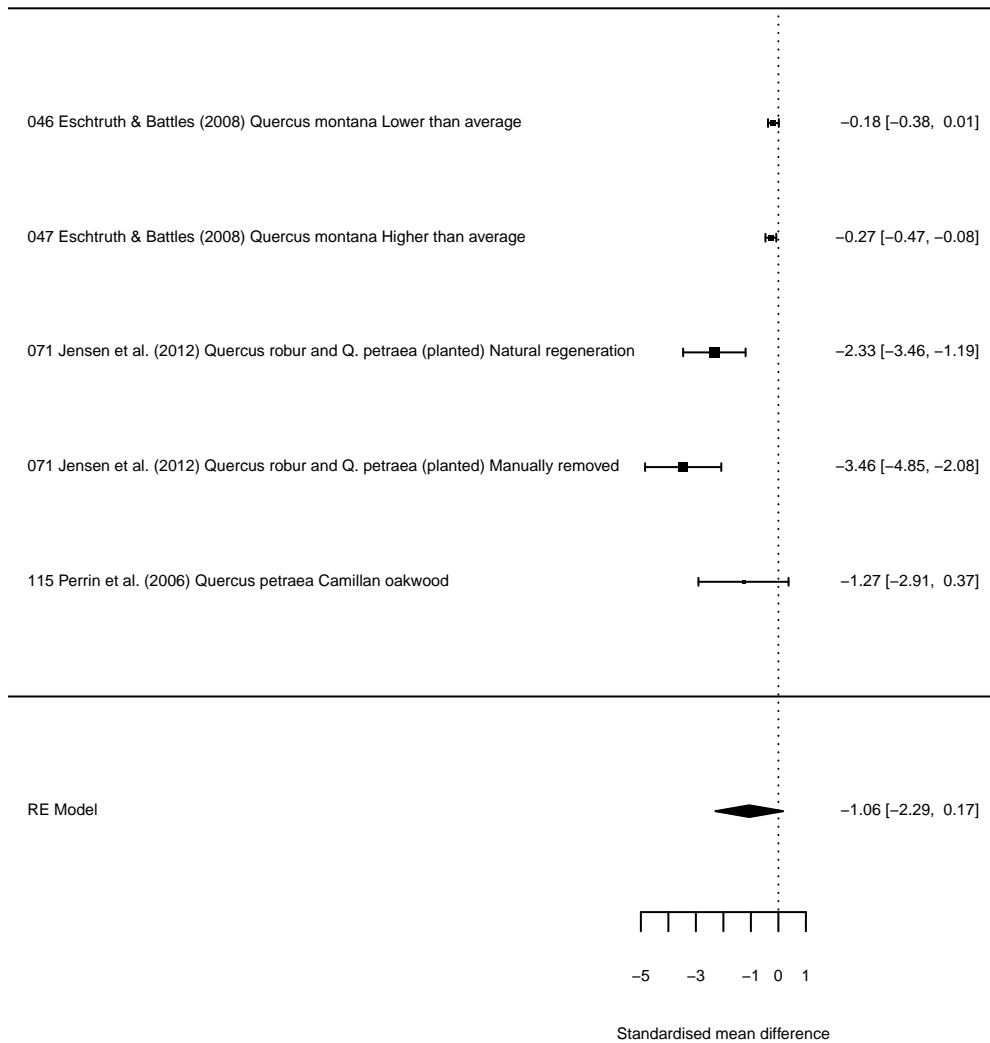
## Height of *Betula* seedlings/saplings



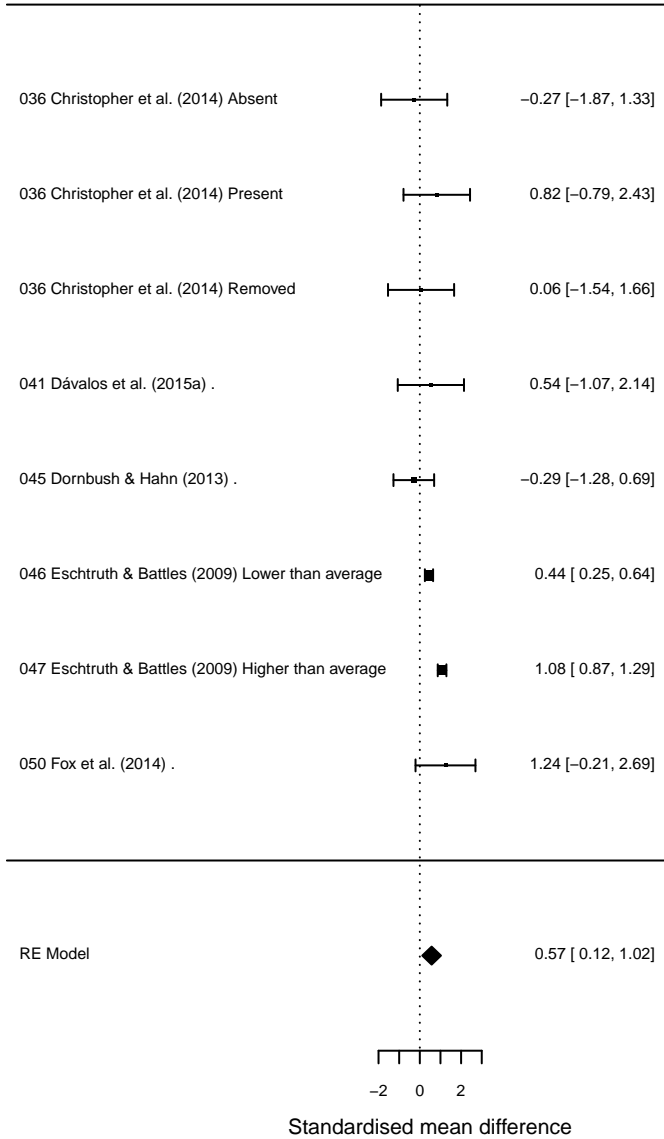
## Height of *Populus* seedlings/saplings



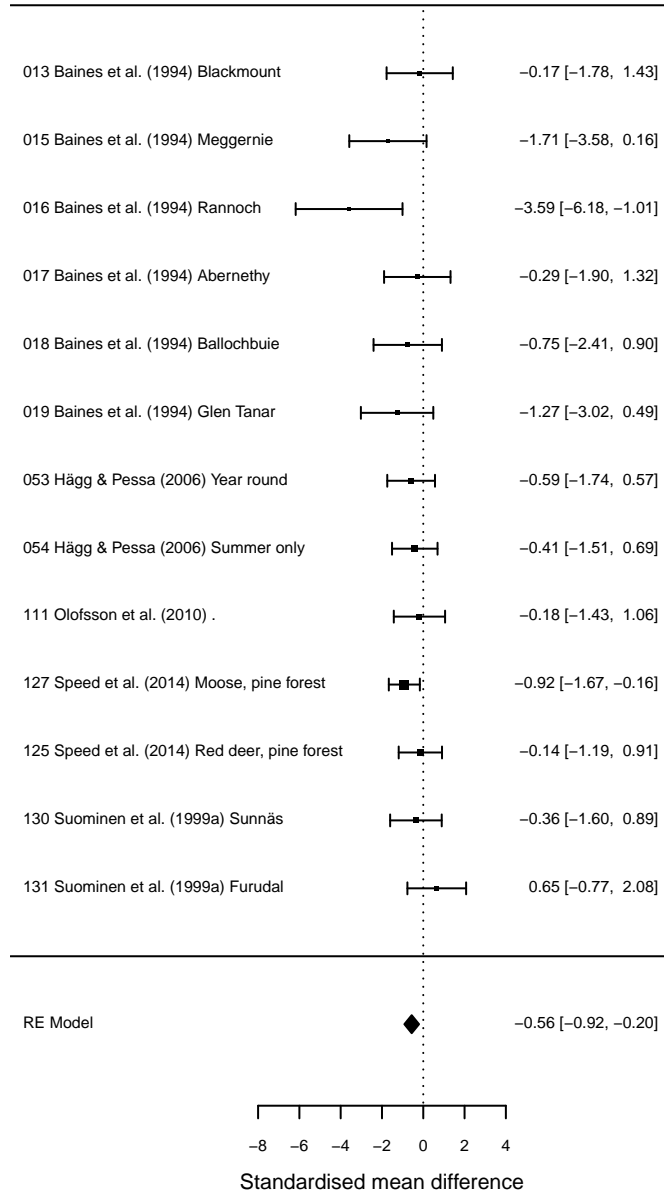
# Height of Quercus seedlings/saplings



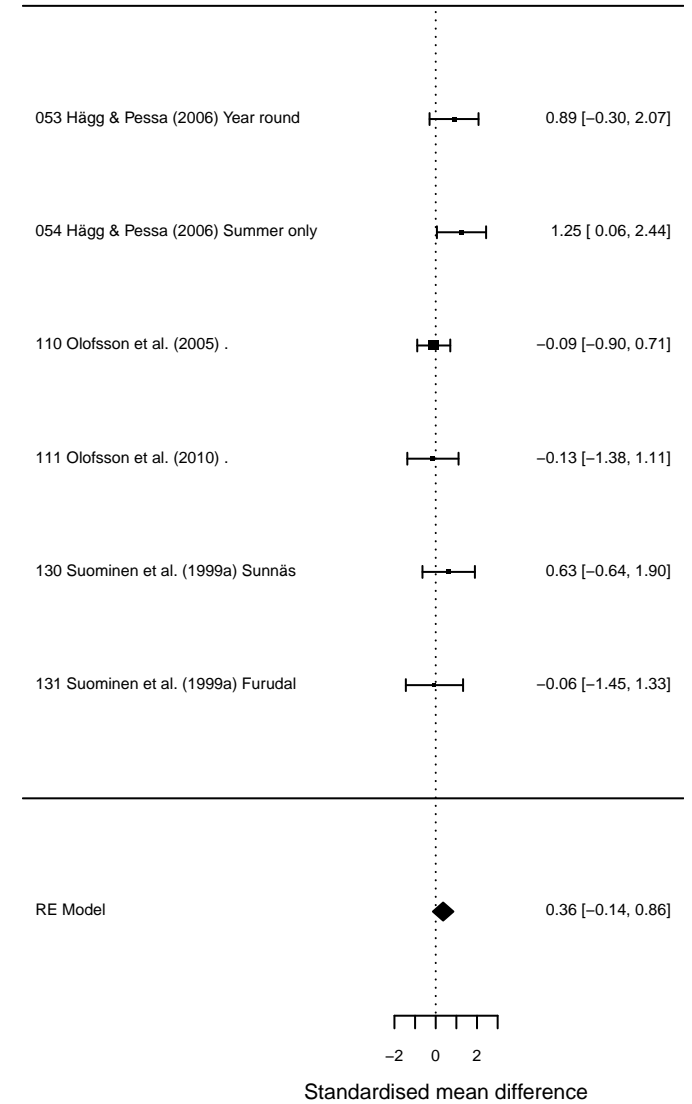
### Abundance of *Alliaria petiolata*



### Abundance of *Calluna vulgaris*



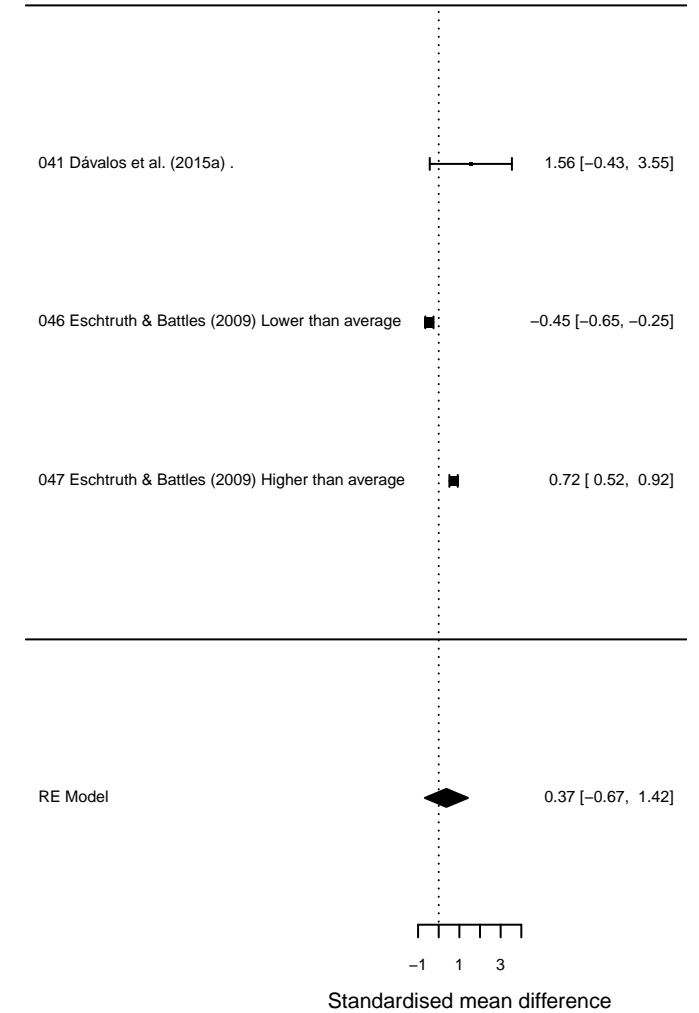
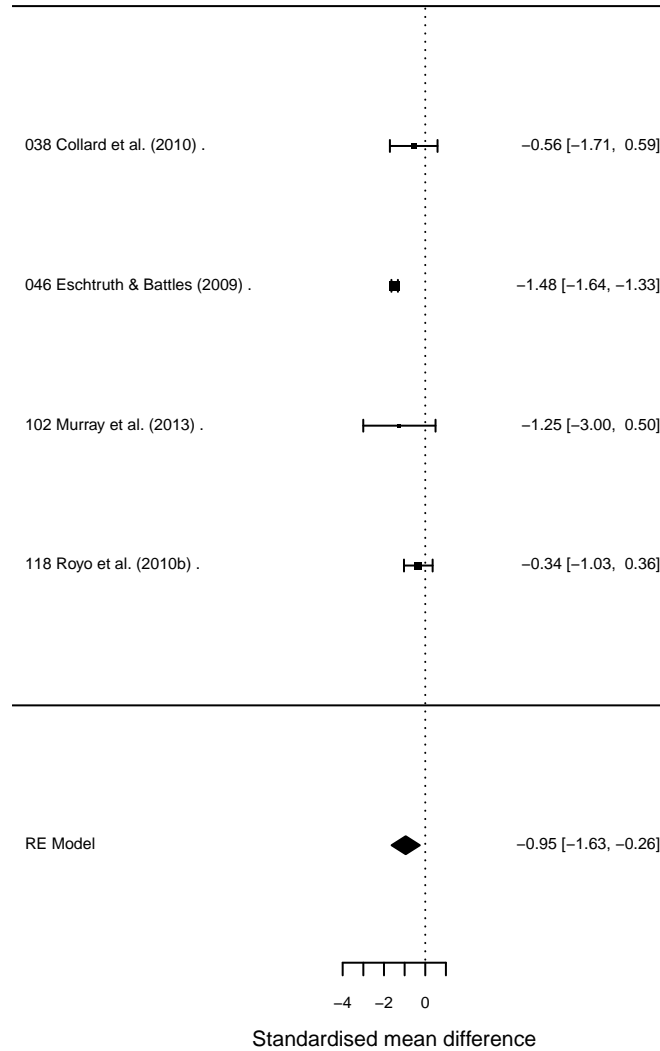
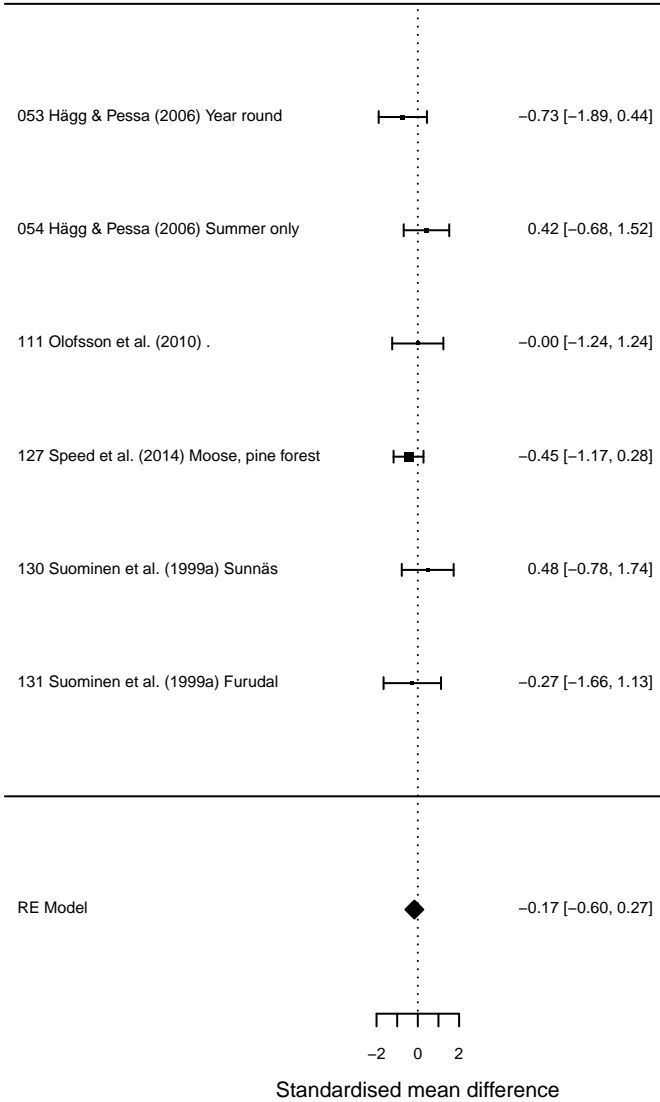
### Abundance of *Deschampsia flexuosa*



### Abundance of *Empetrum nigrum*

### Abundance of *Maianthemum canadense*

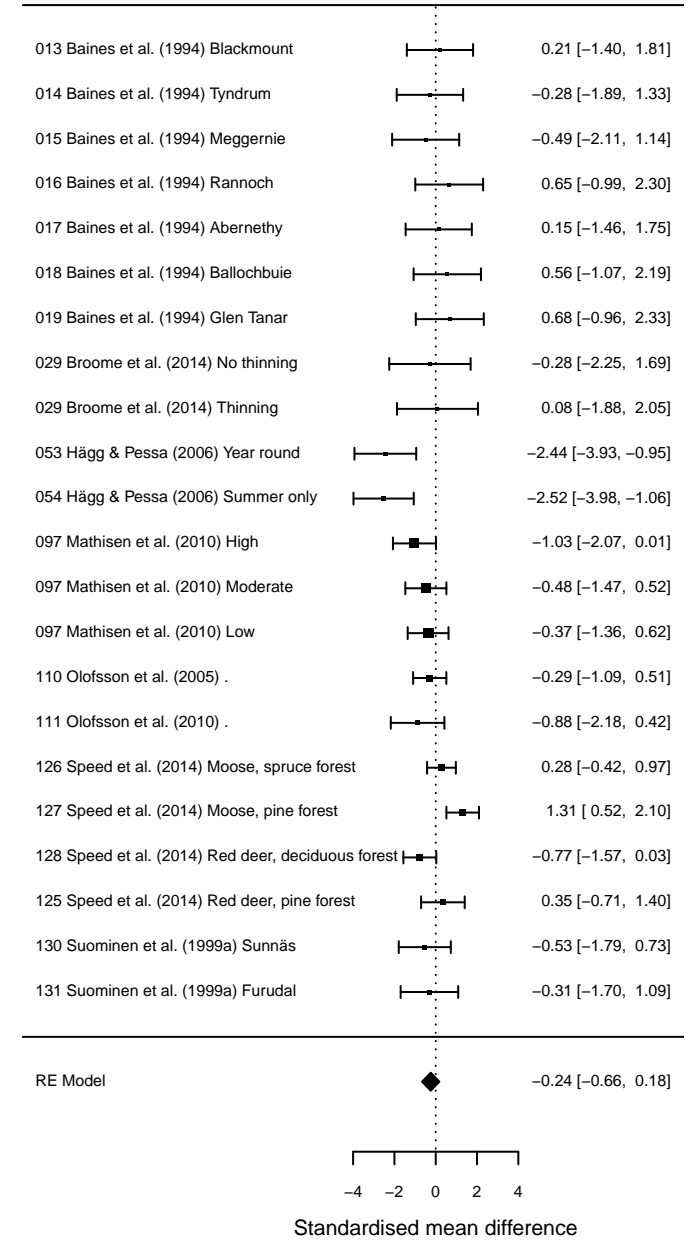
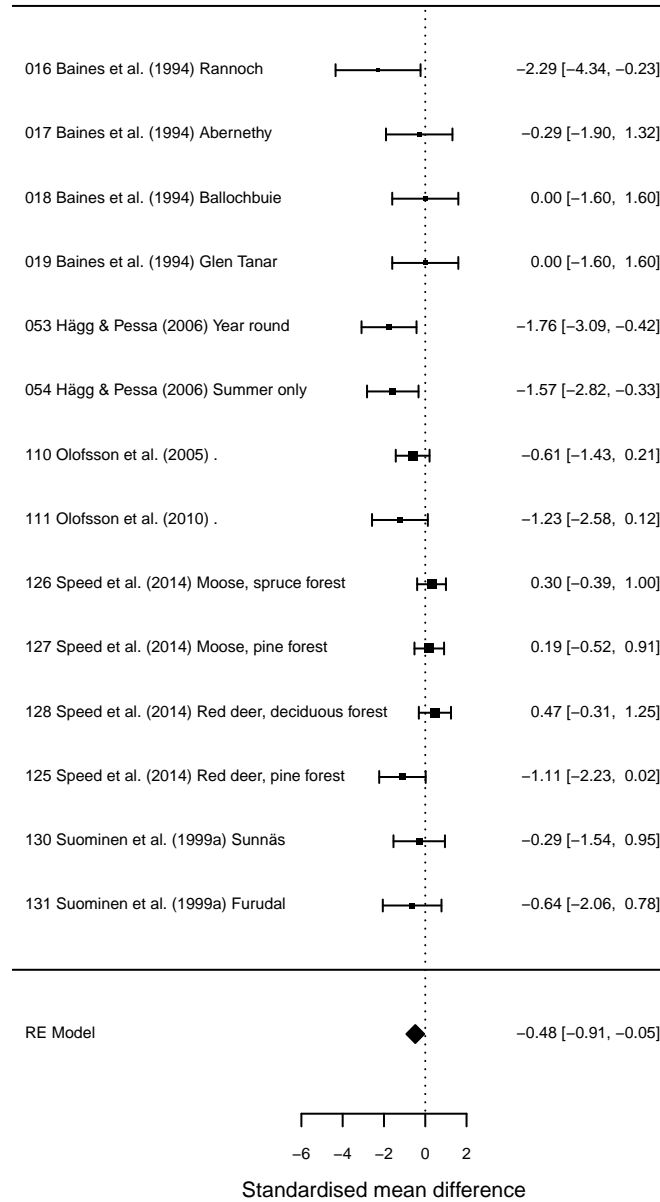
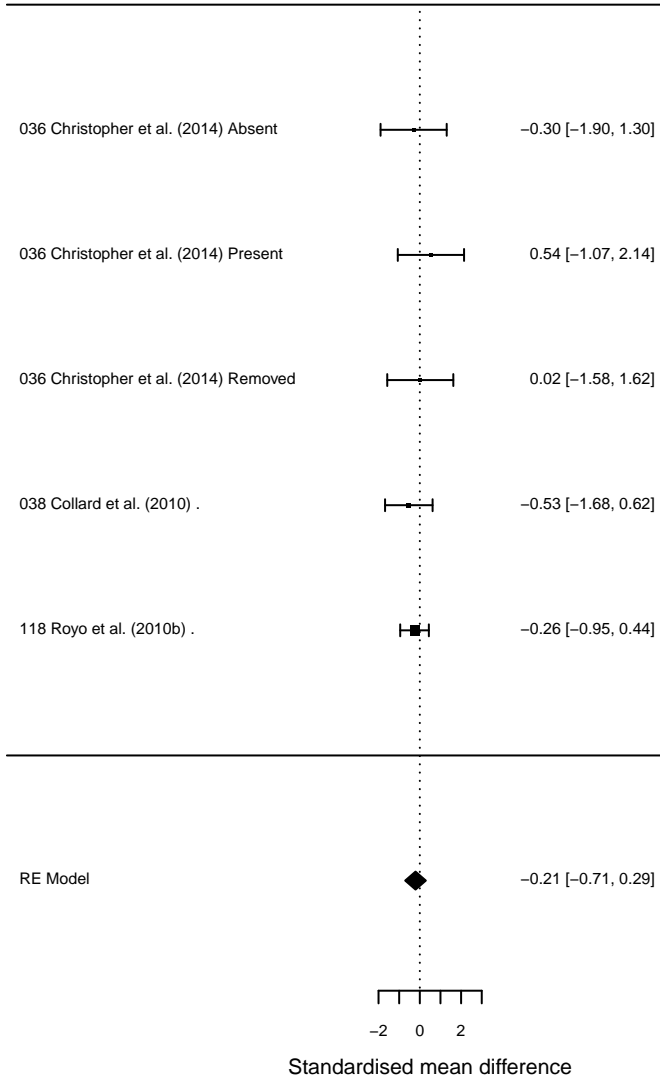
### Abundance of *Microstegium vimineum*



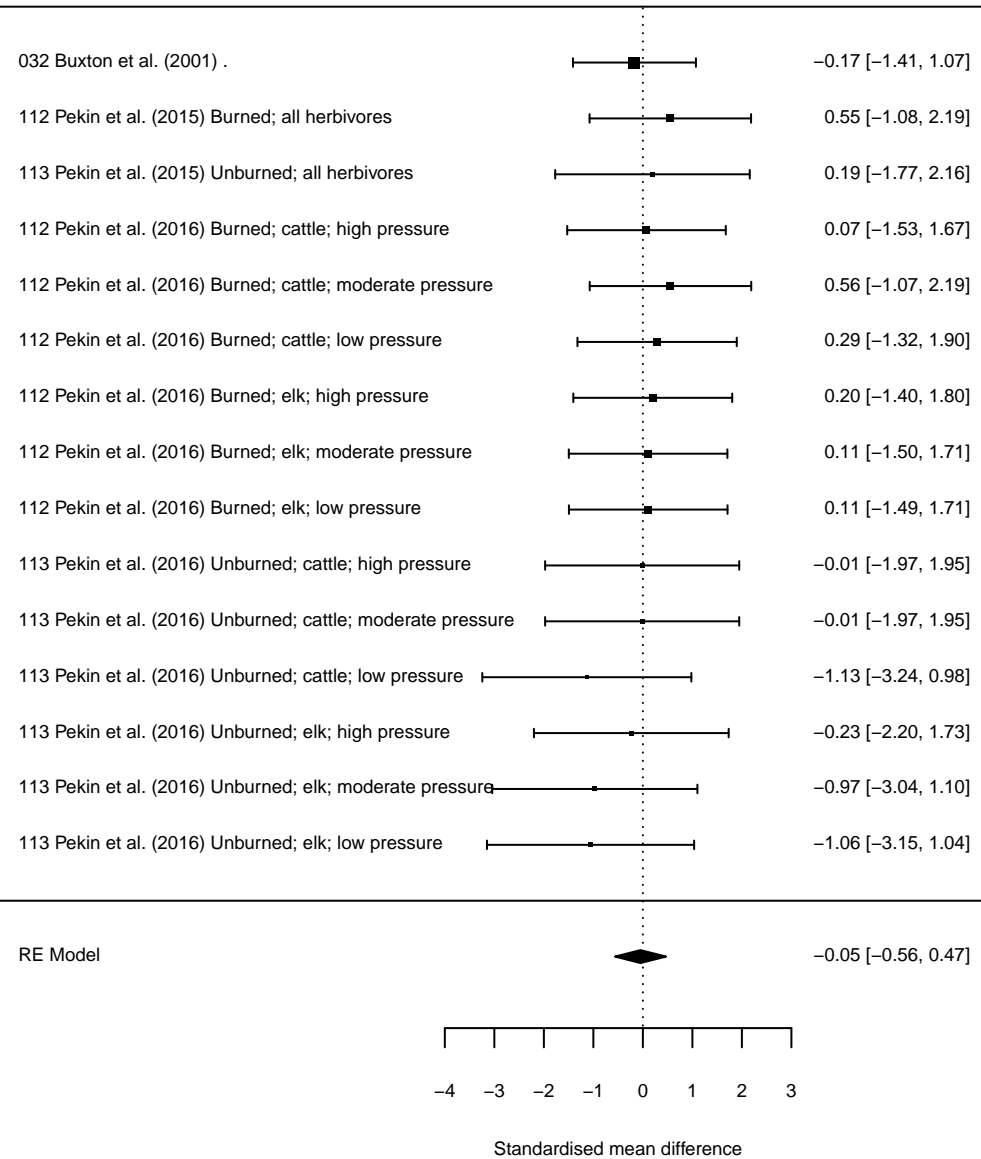
**Abundance of *Trillium* spp.**

**Abundance of *Vaccinium vitis-idaea***

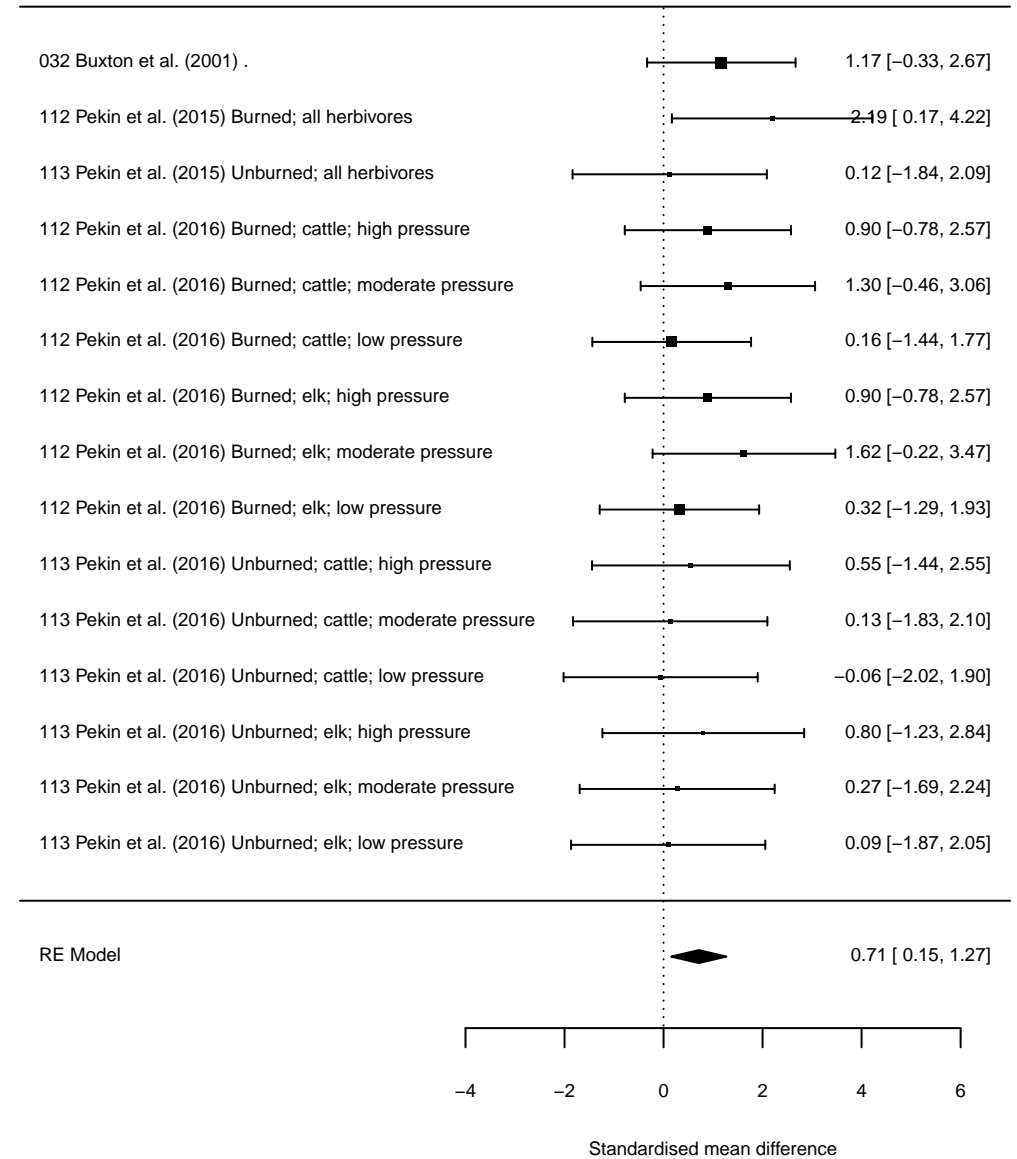
**Abundance of *Vaccinium myrtillus***



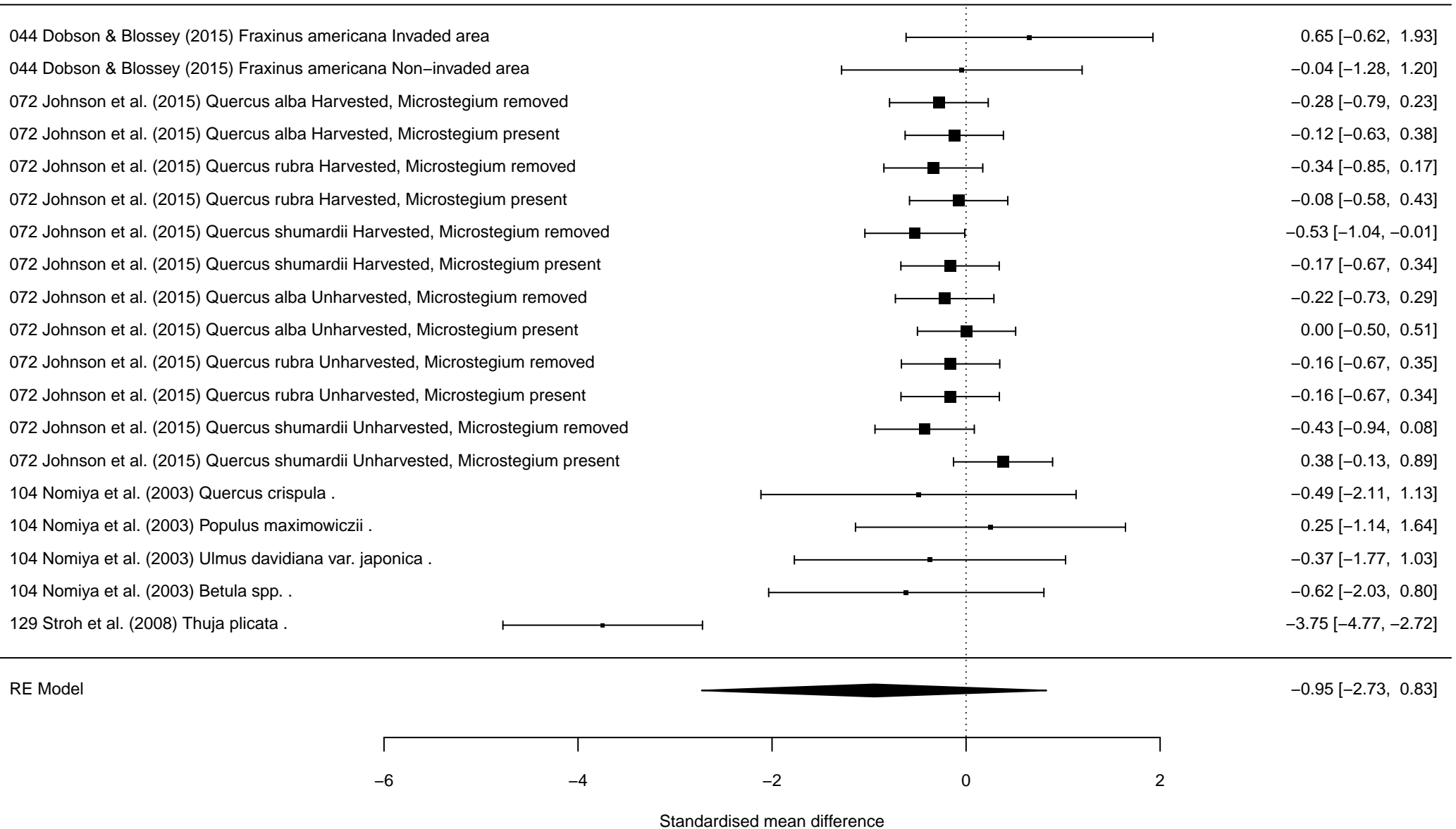
## Understorey species richness, native



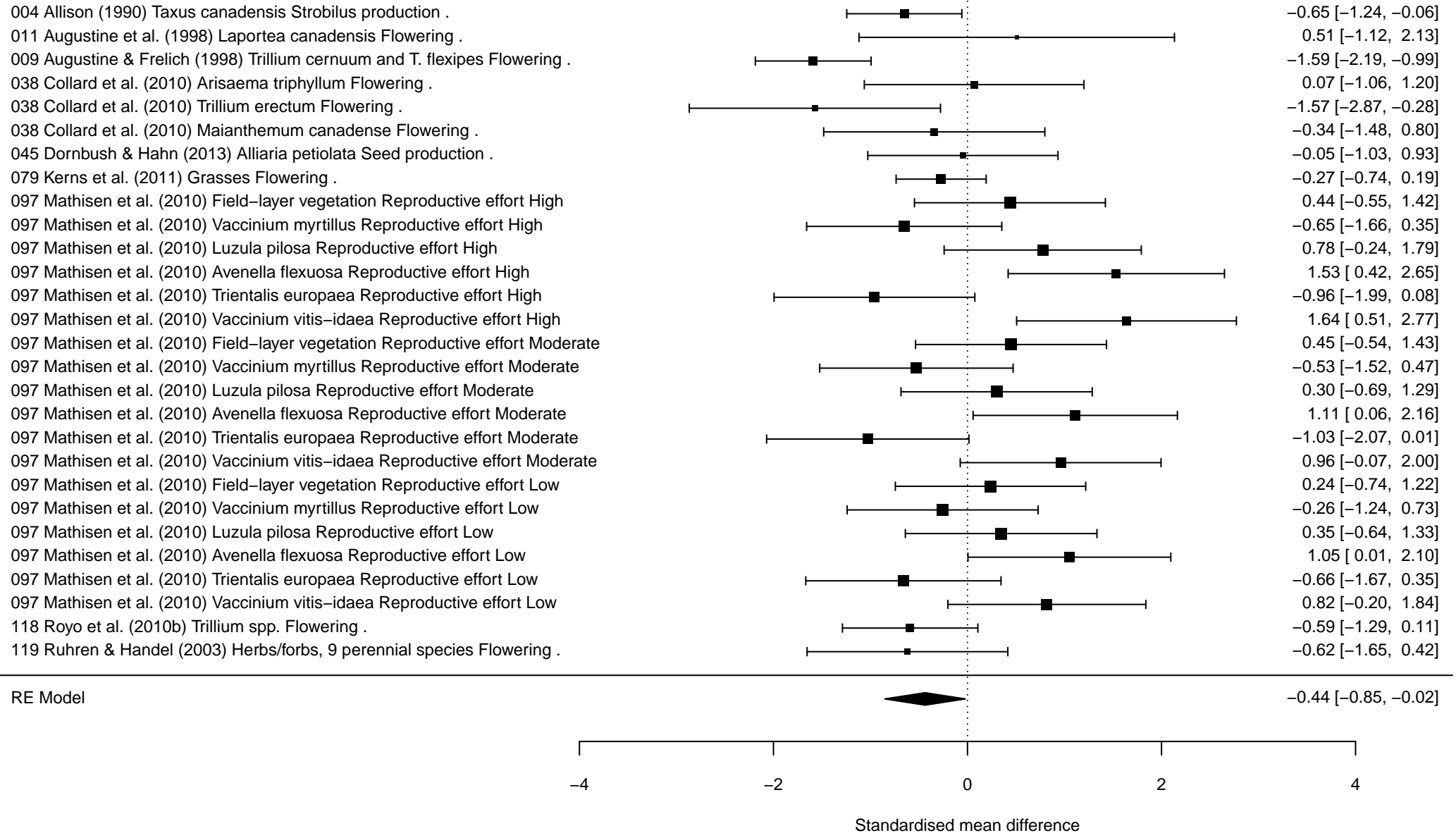
## Understorey species richness, exotic



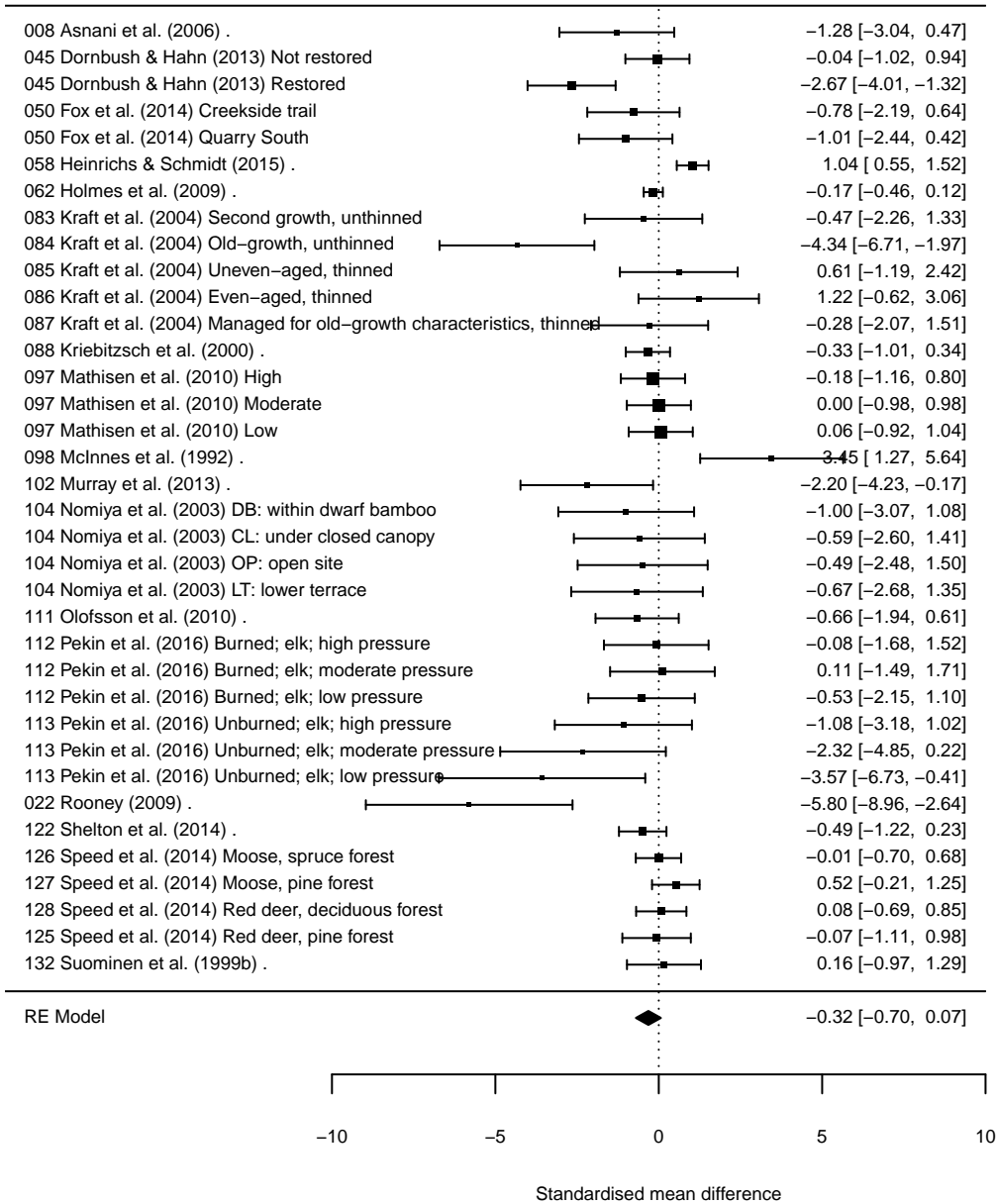
## Survival of tree seedlings



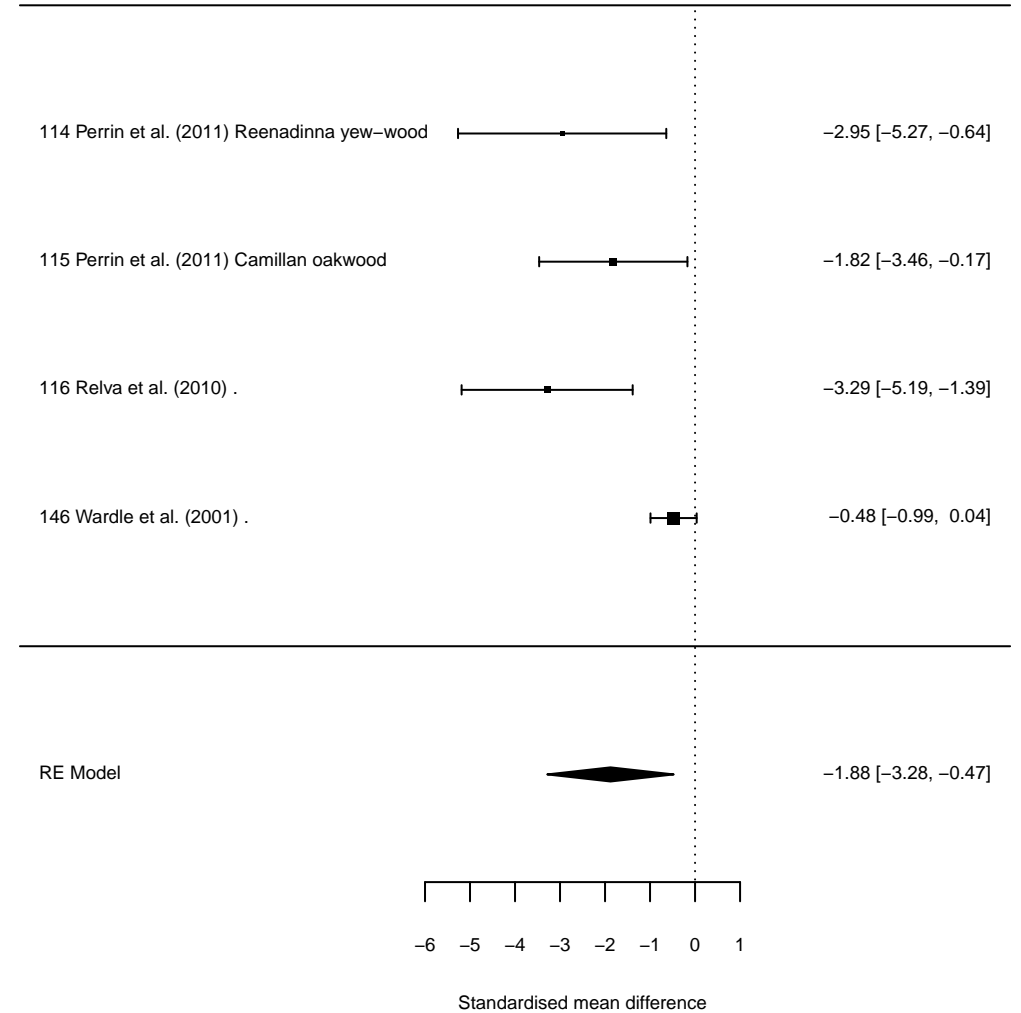
## Flowering and other reproductive efforts



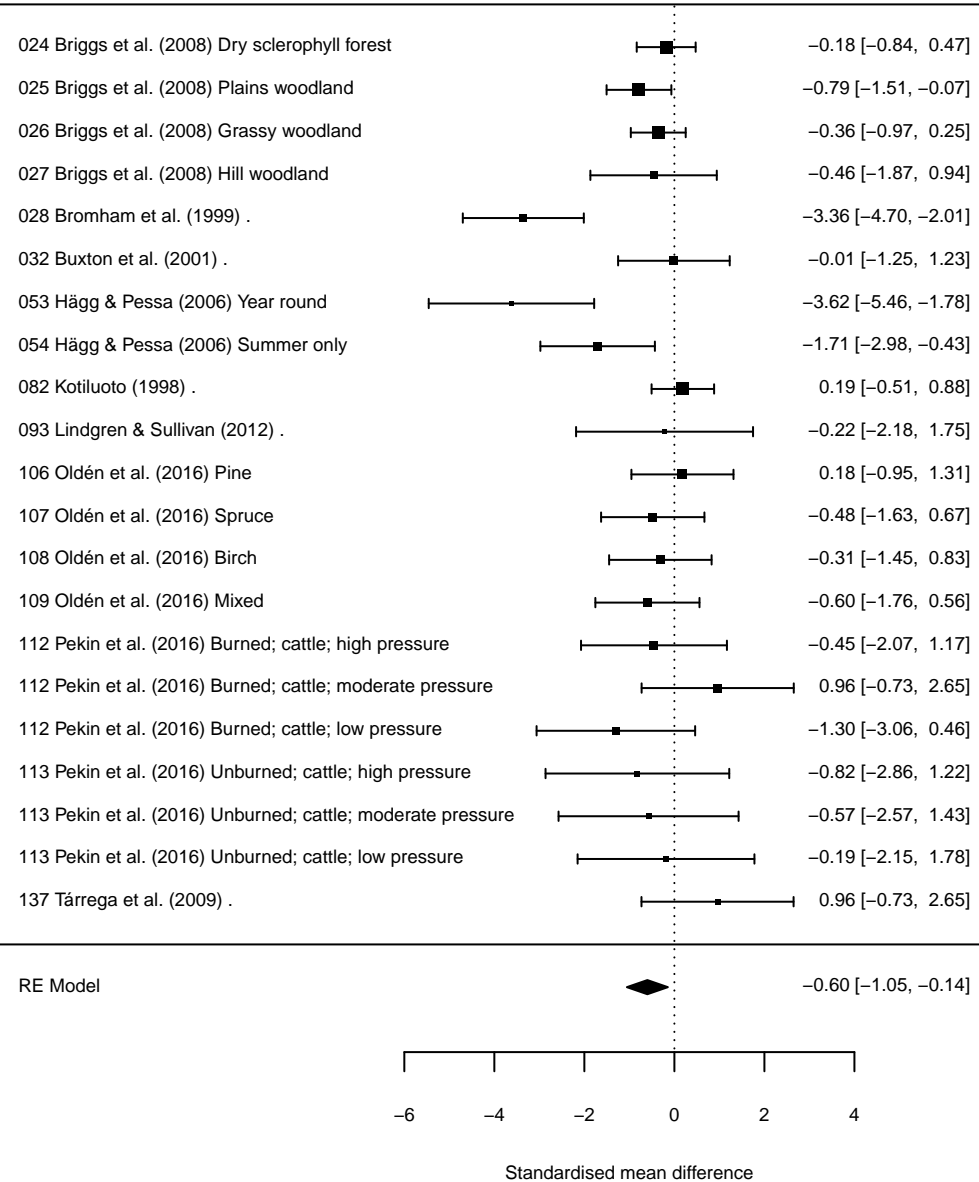
### Understorey abundance, native ungulates



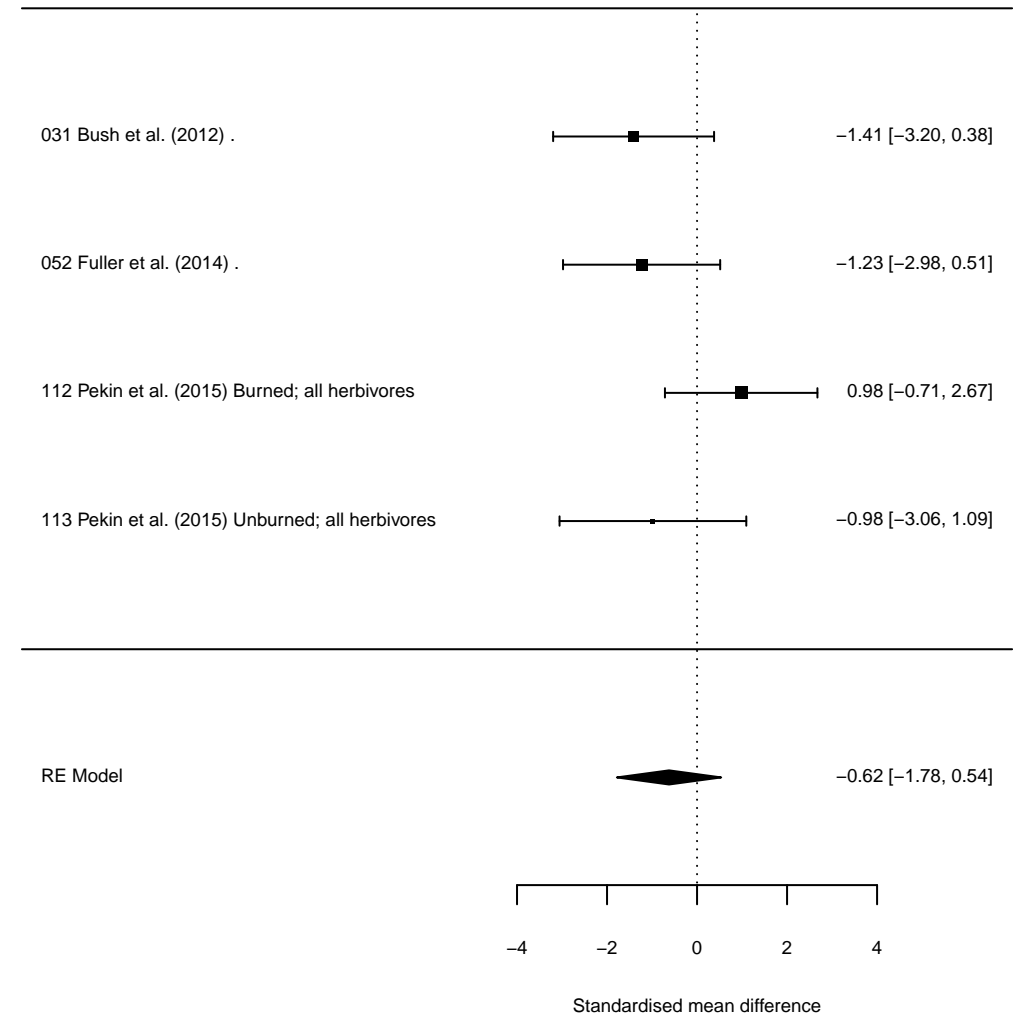
### Understorey abundance, introduced ungulates



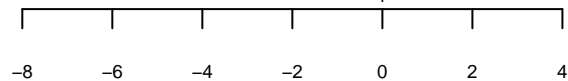
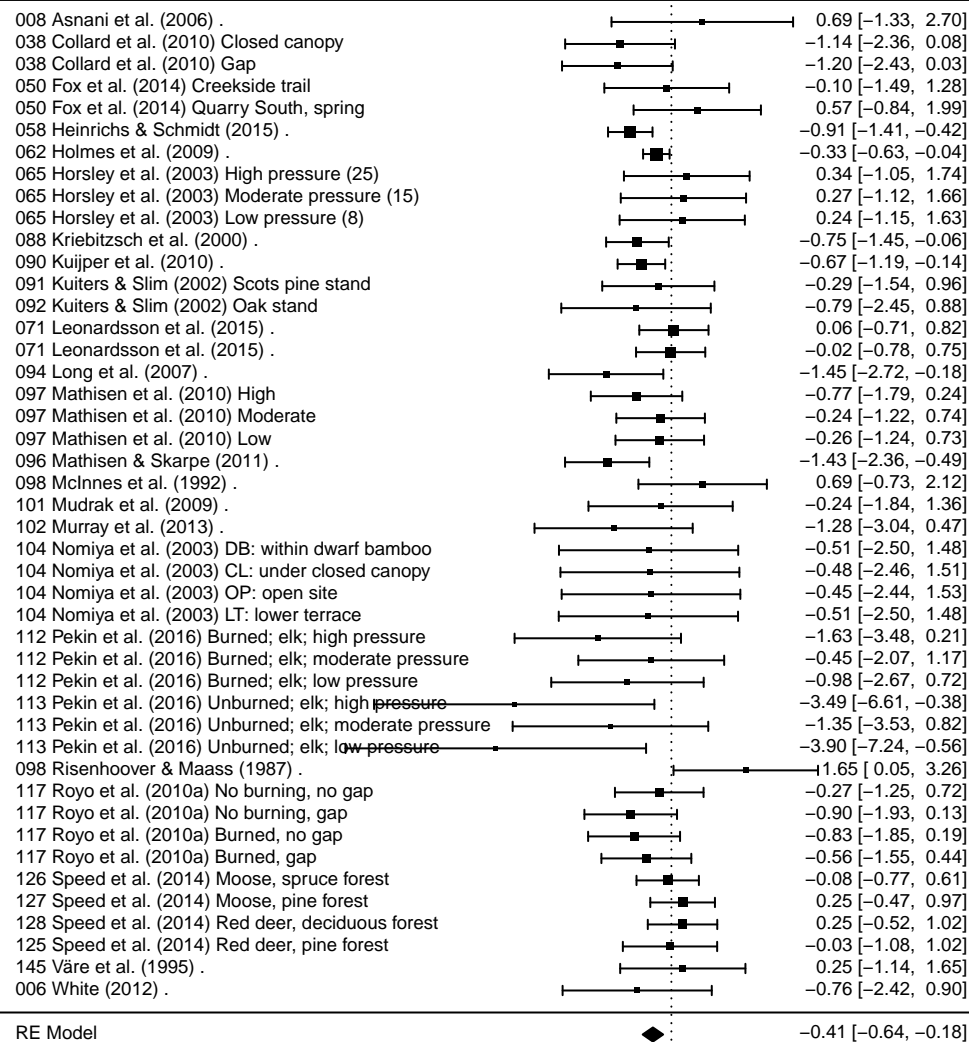
## Understorey abundance, domestic ungulates



## Understorey abundance, mixed ungulates

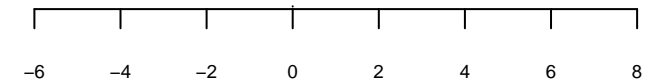
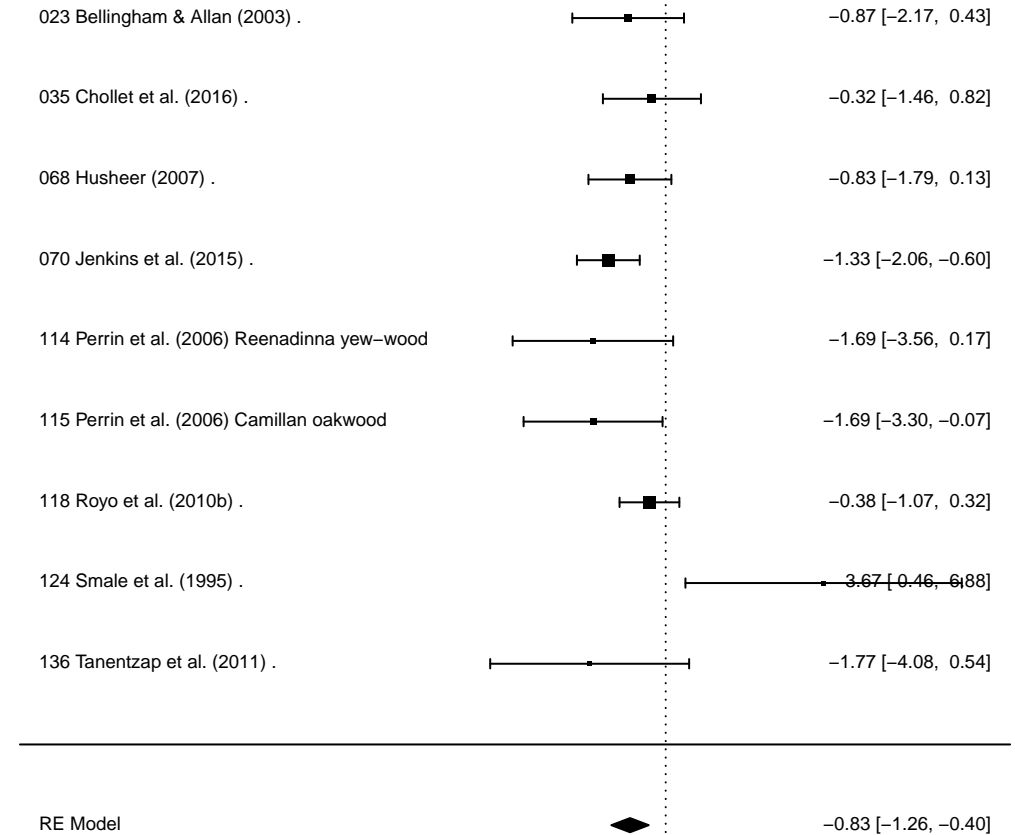


## Woody vegetation abundance, native ungulates



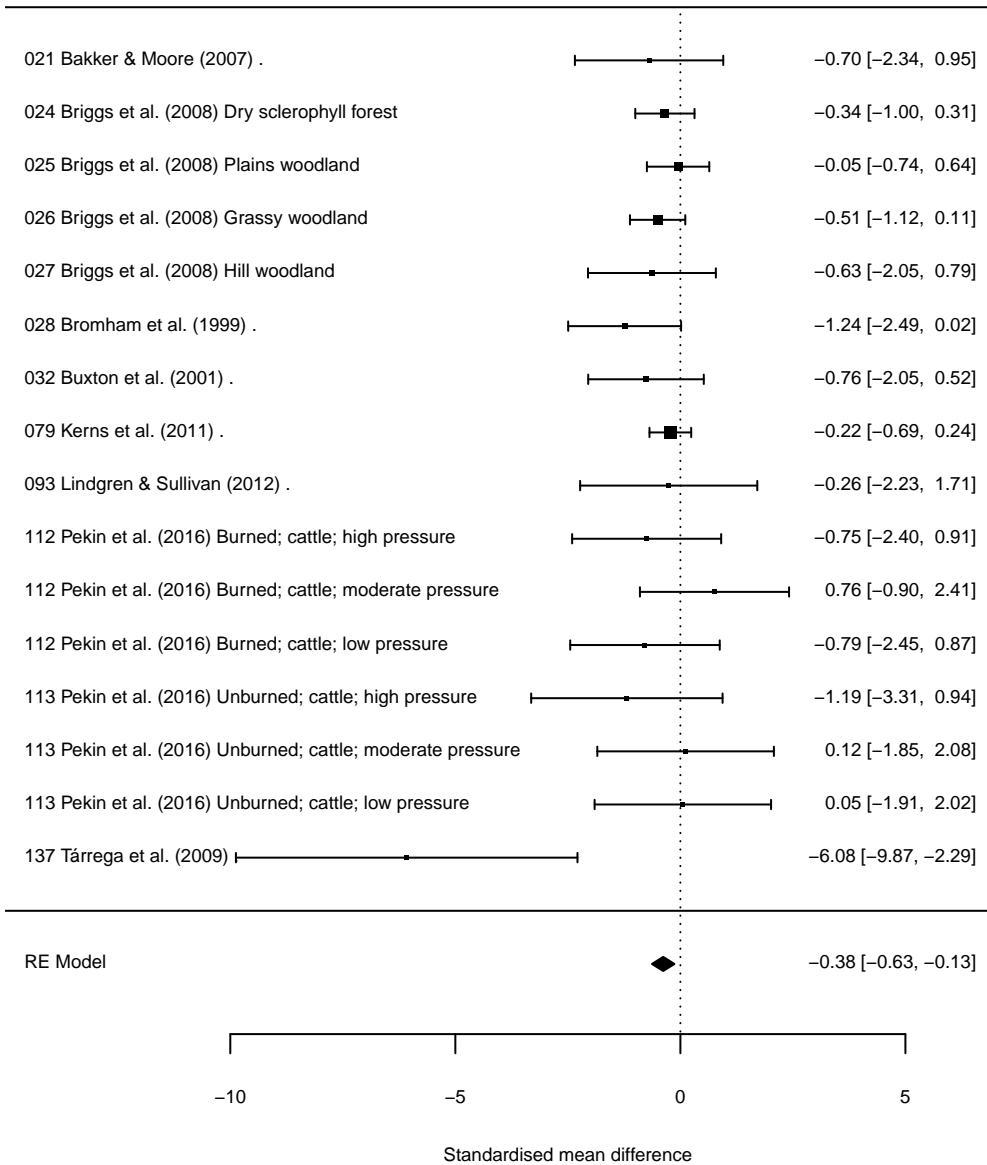
Standardised mean difference

## Woody vegetation abundance, introduced ungulates

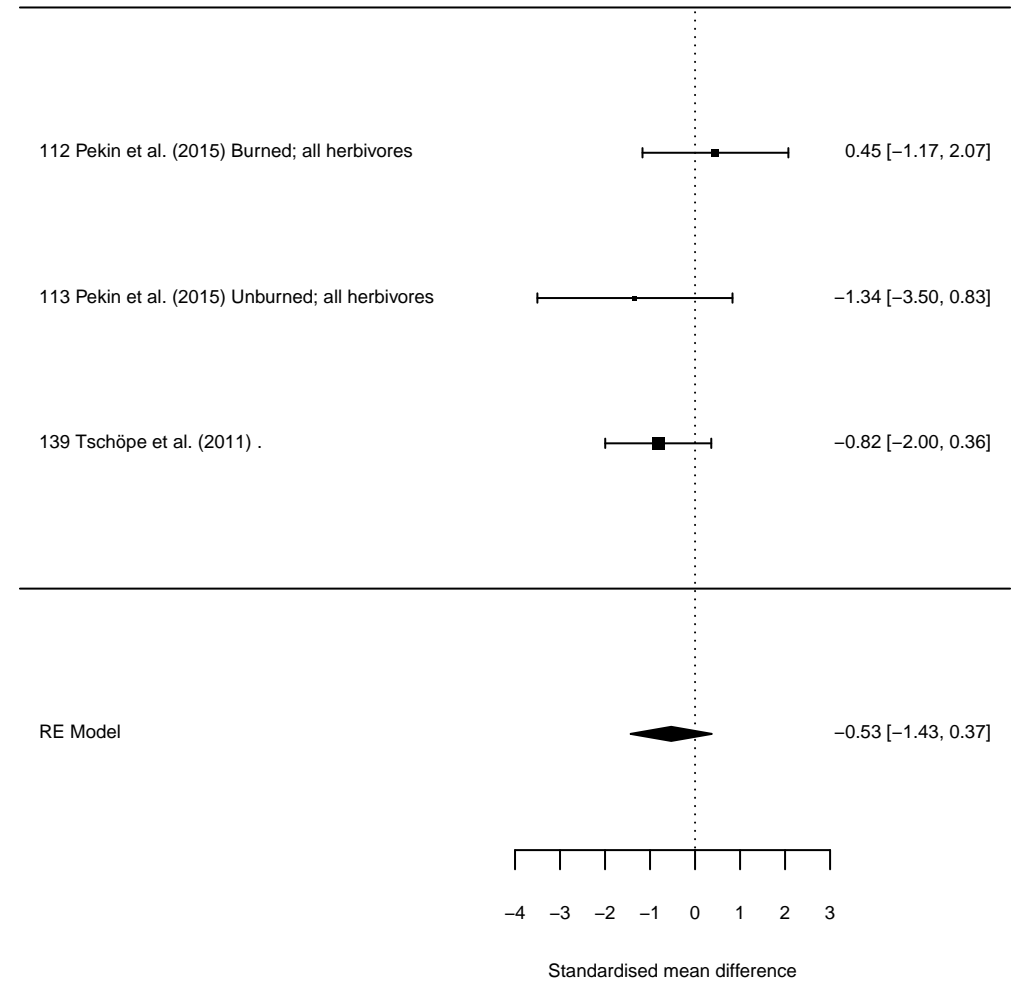


Standardised mean difference

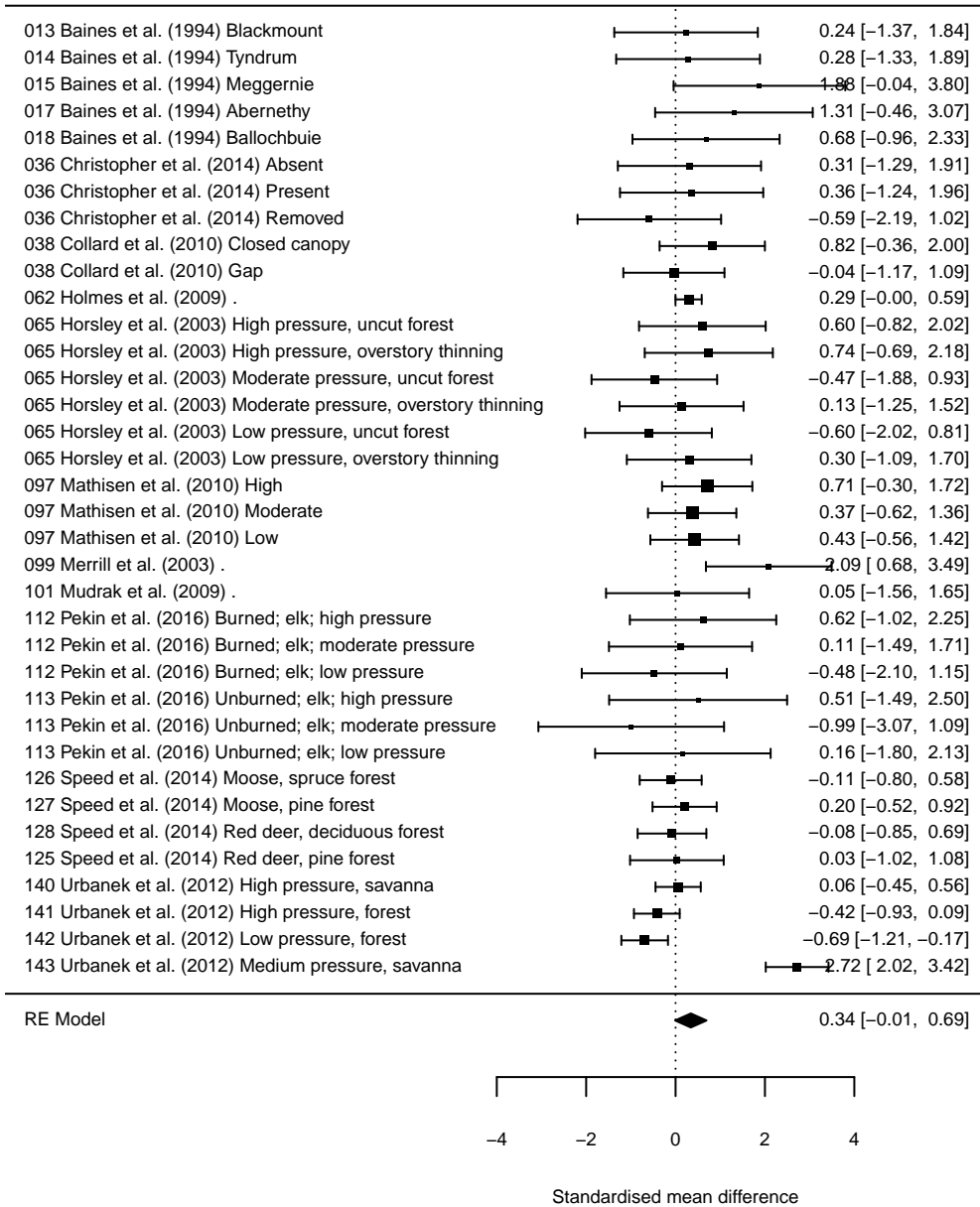
### Woody vegetation abundance, domestic ungulates



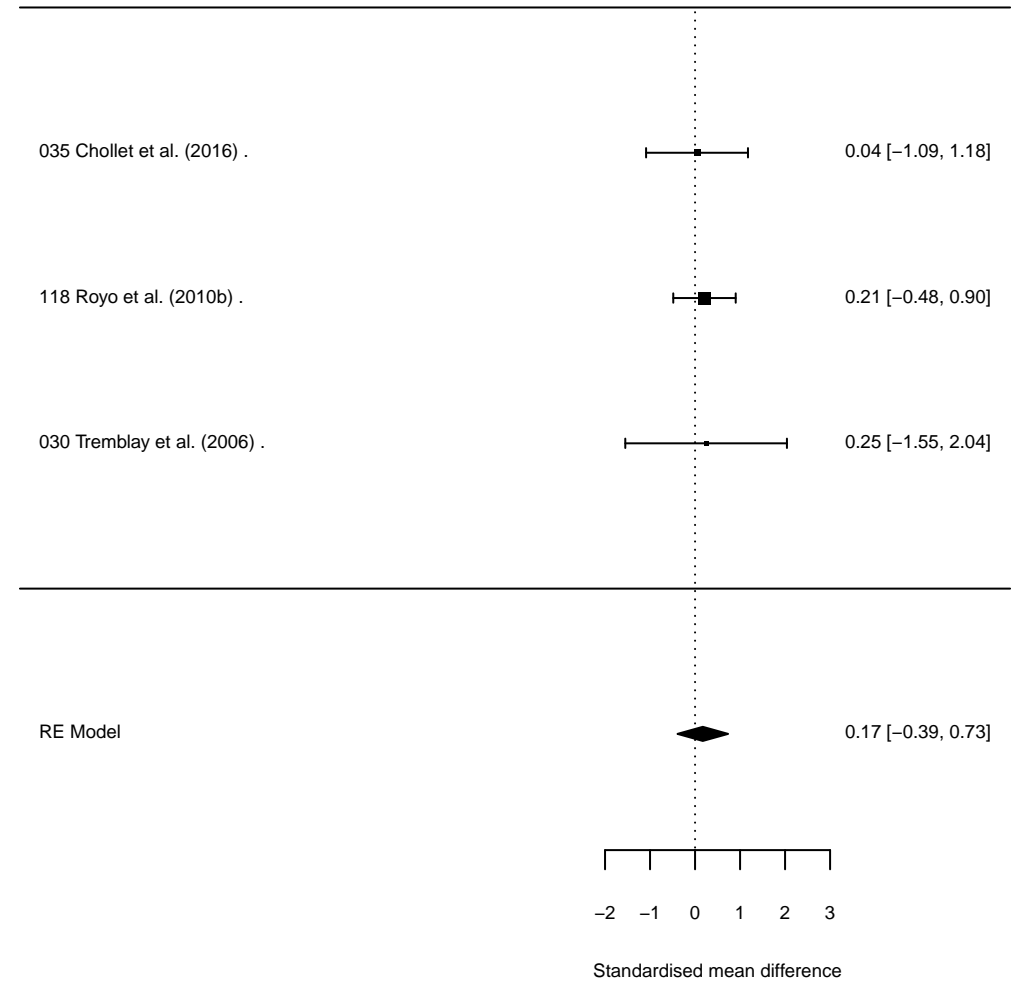
### Woody vegetation abundance, mixed ungulates



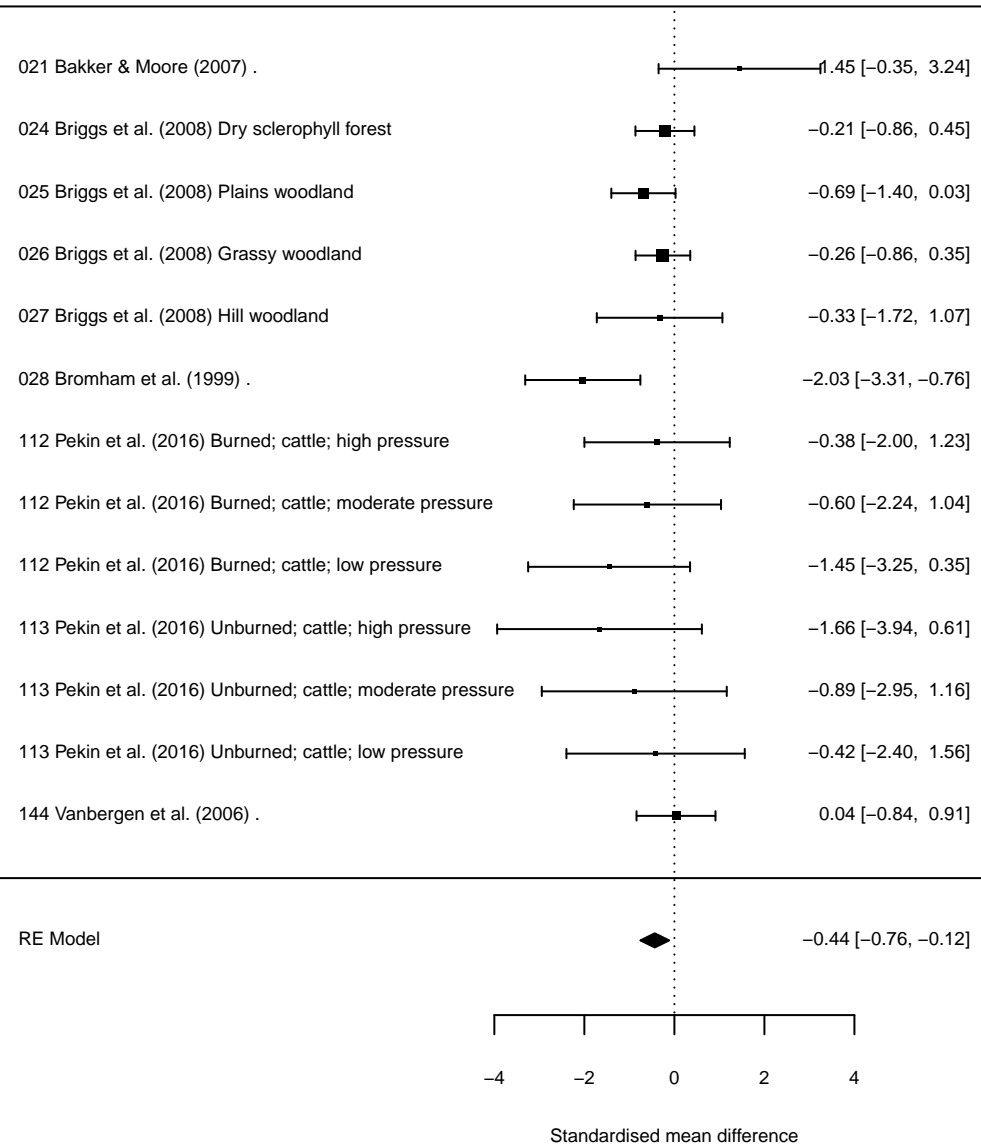
### Graminoid abundance, native ungulates



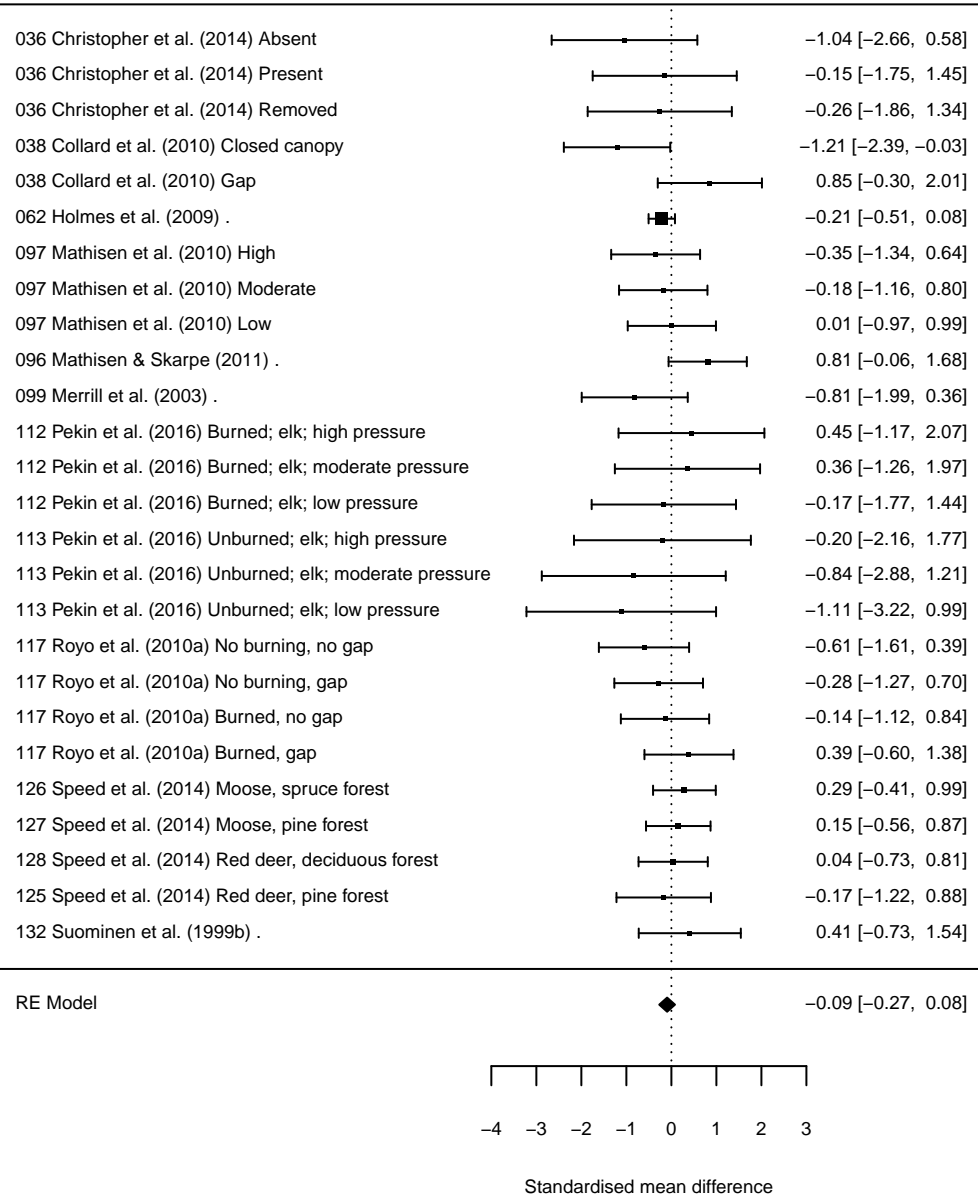
### Graminoid abundance, introduced ungulates



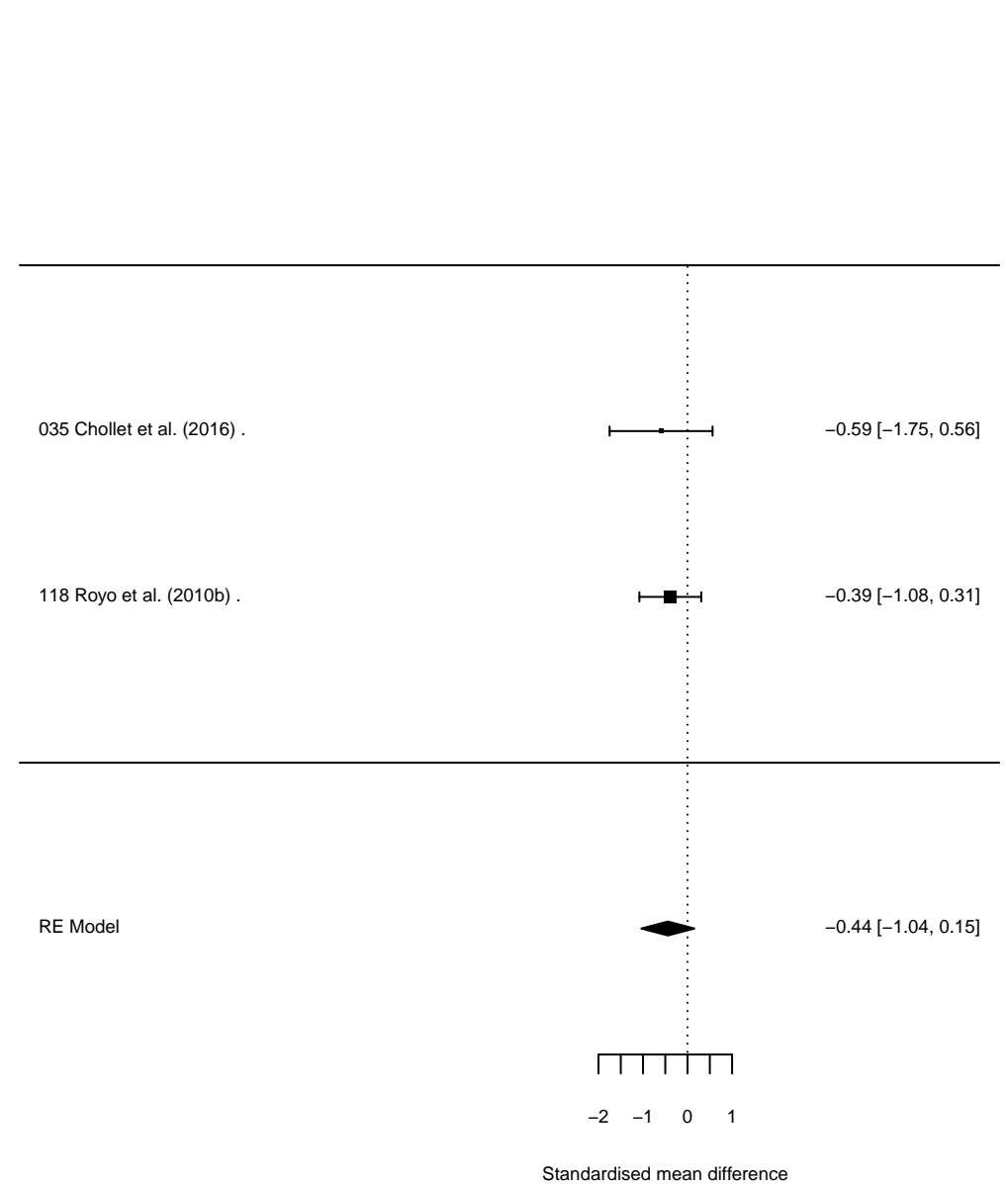
## Graminoid abundance, domestic ungulates



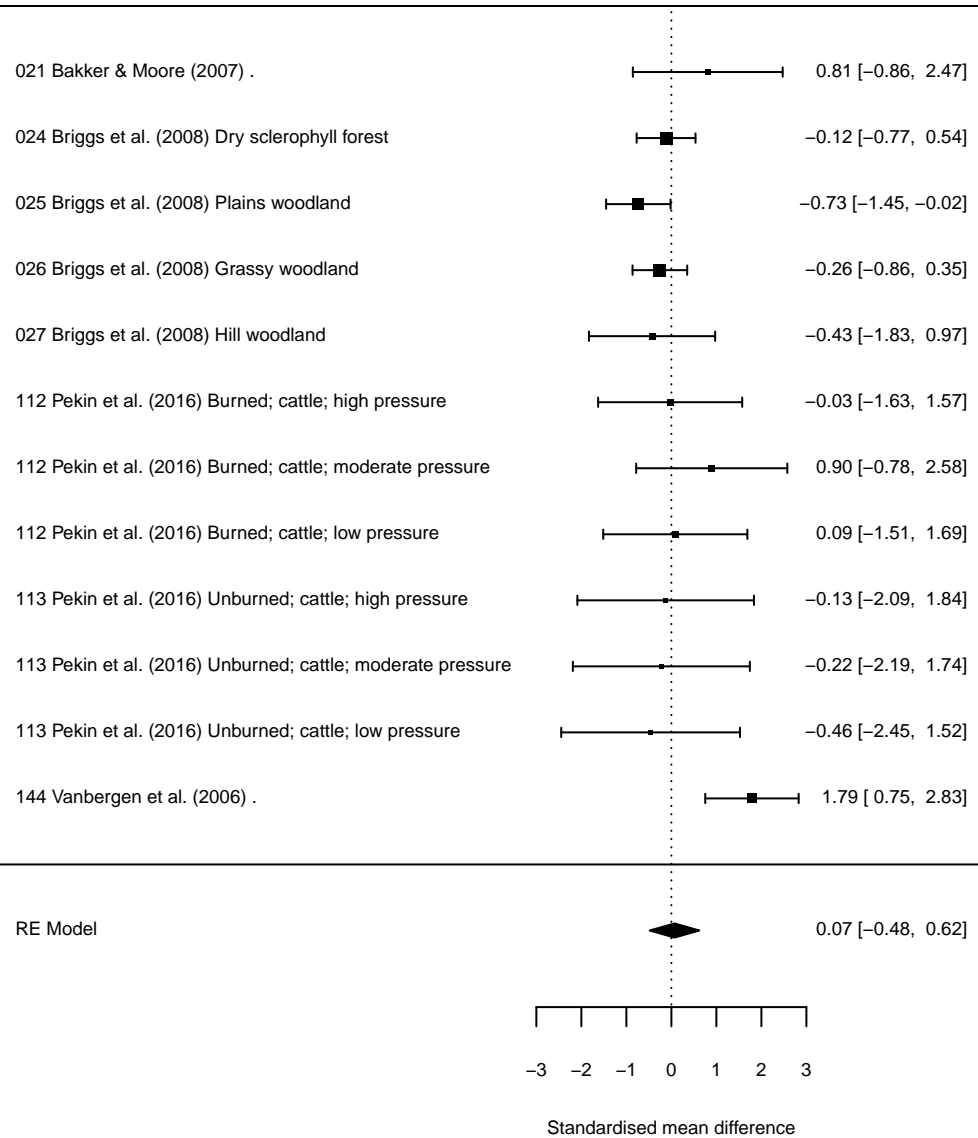
### Forb abundance, native ungulates



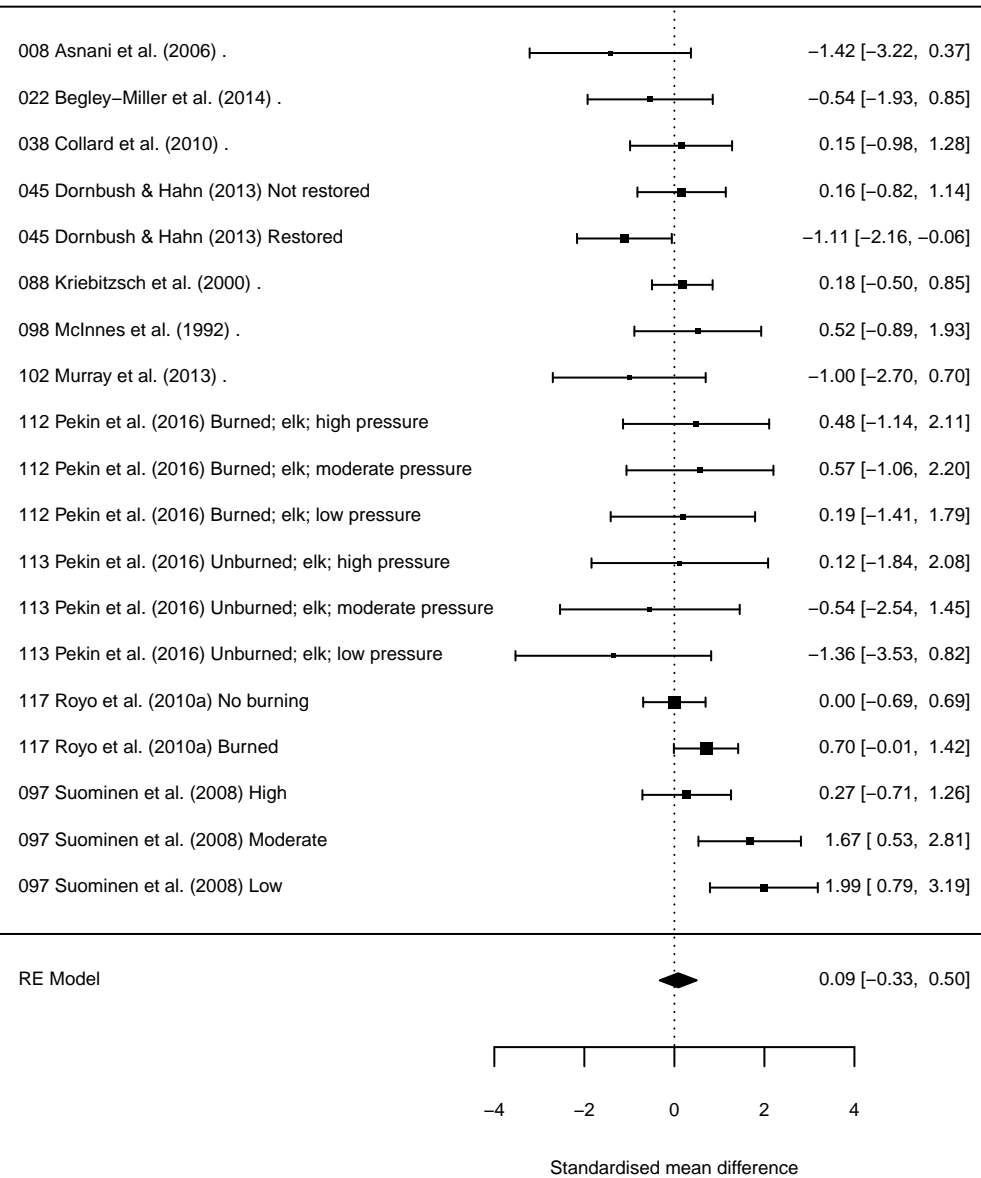
### Forb abundance, introduced ungulates



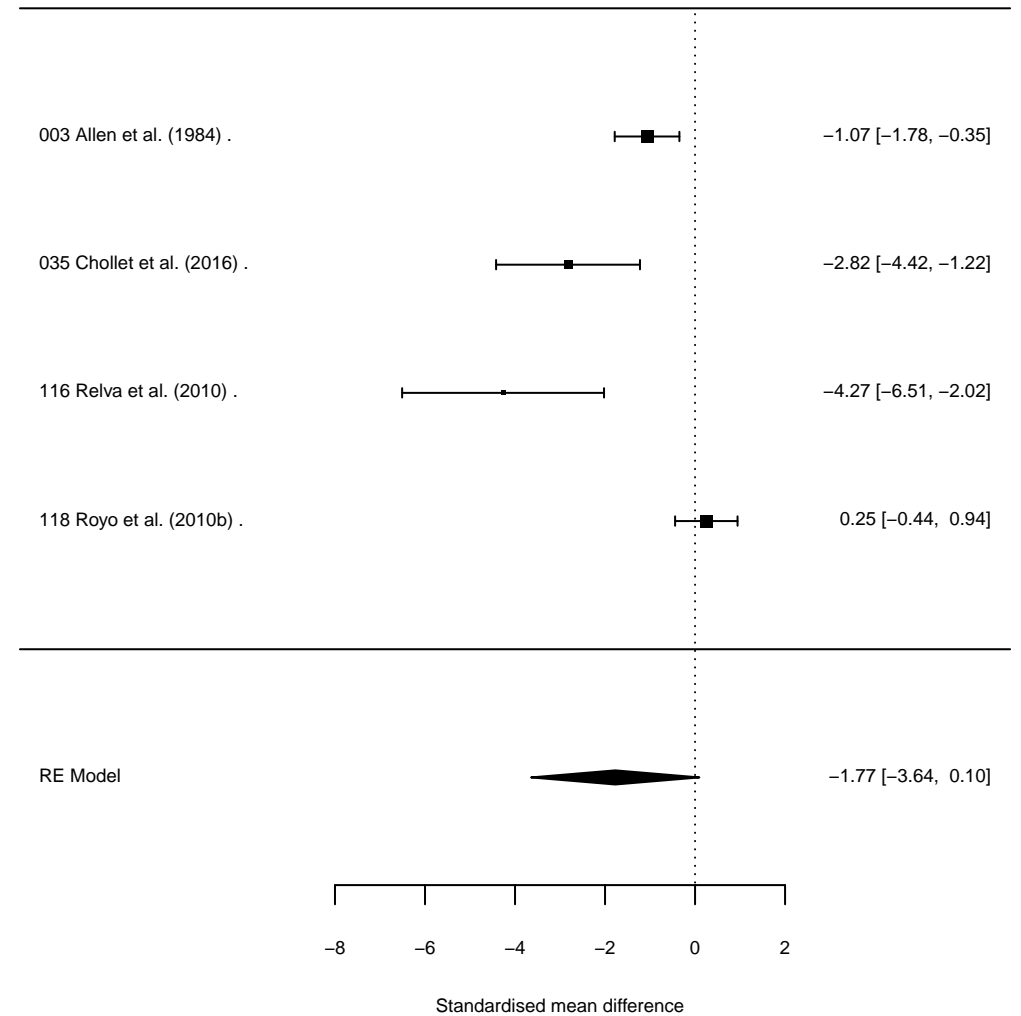
## Forb abundance, domestic ungulates



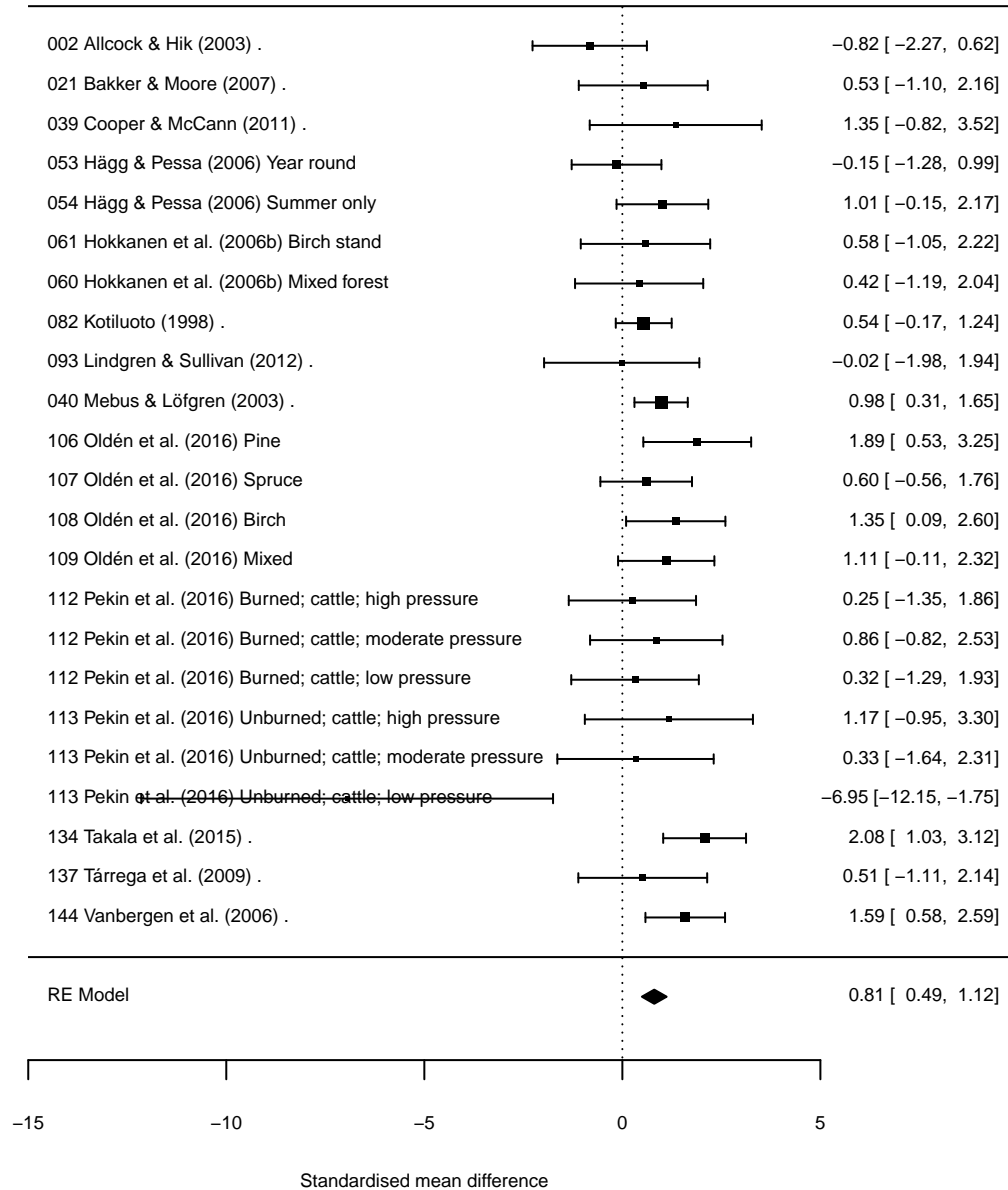
## Understorey species richness, native ungulates



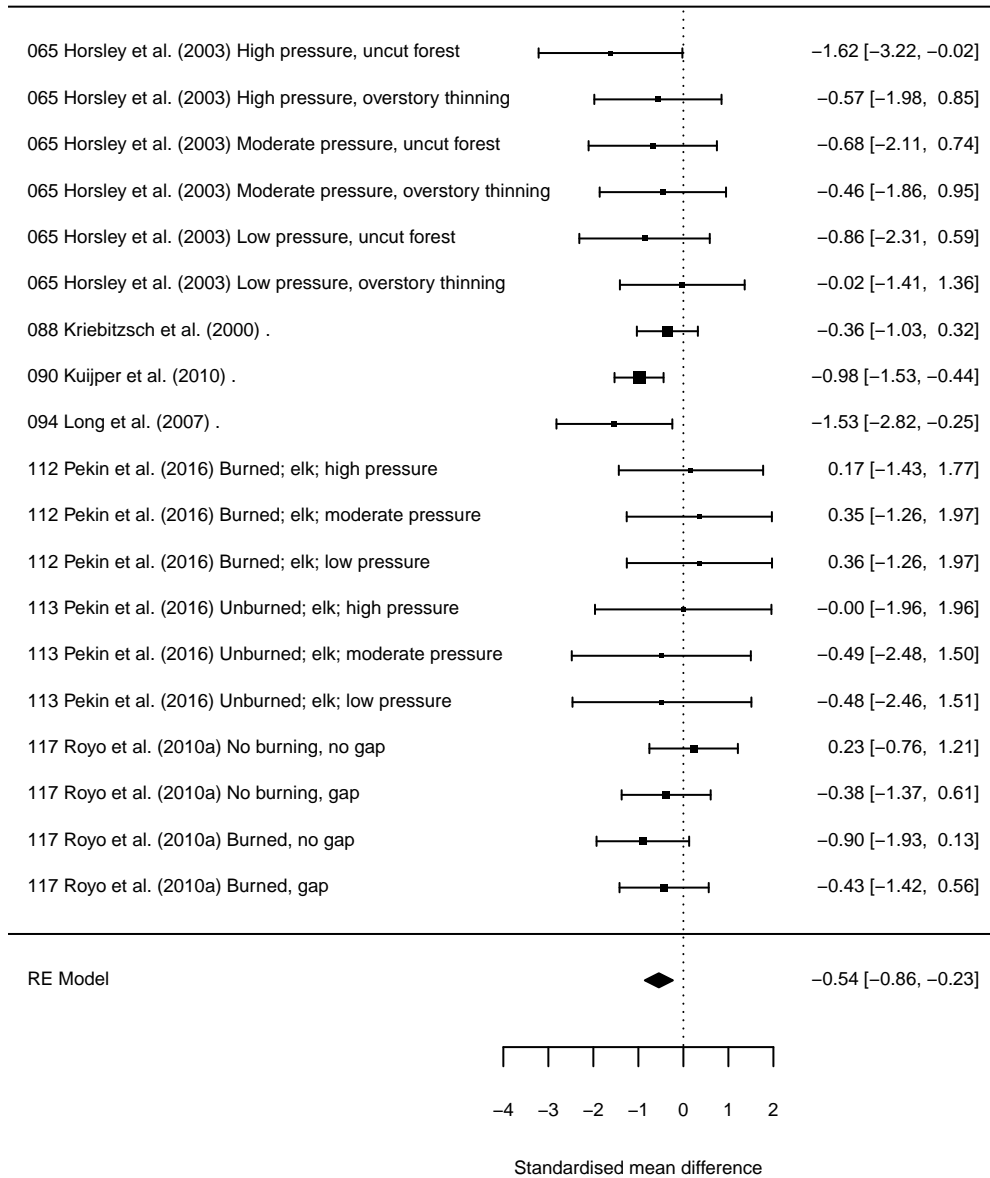
## Understorey species richness, introduced ungulates



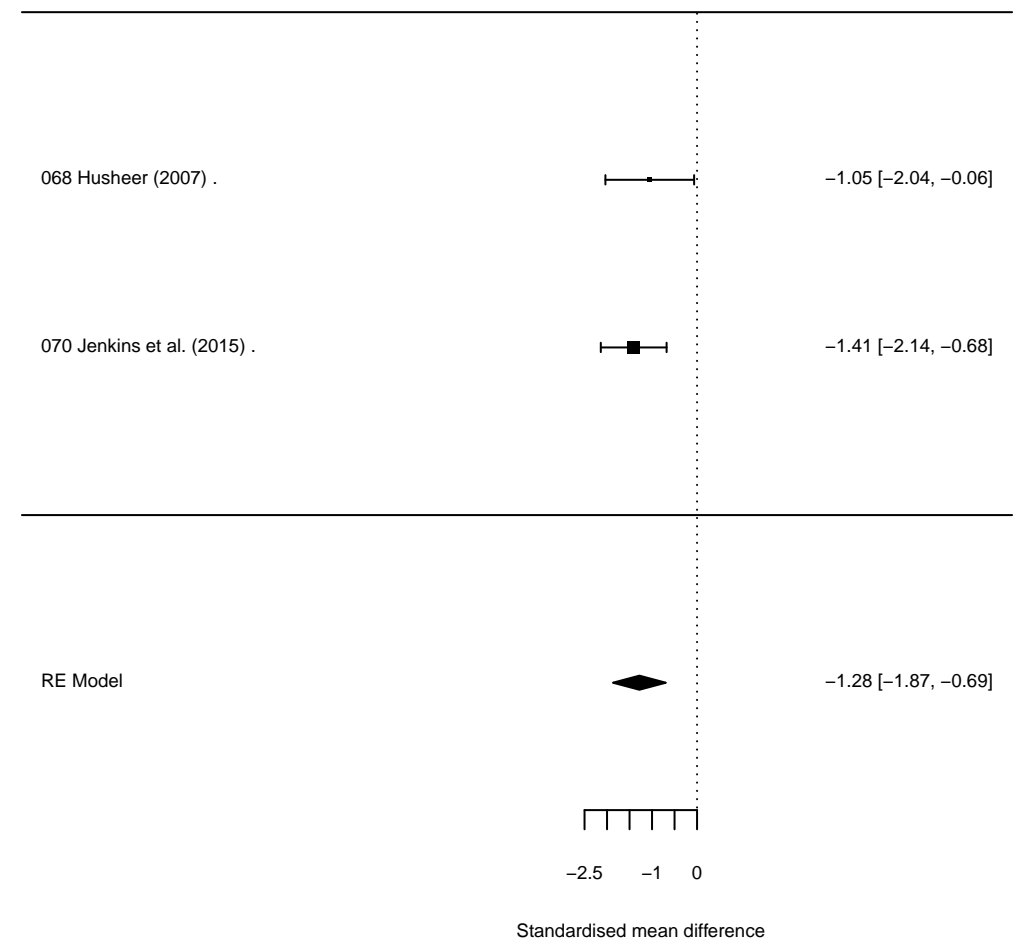
## Understorey species richness, domestic ungulates



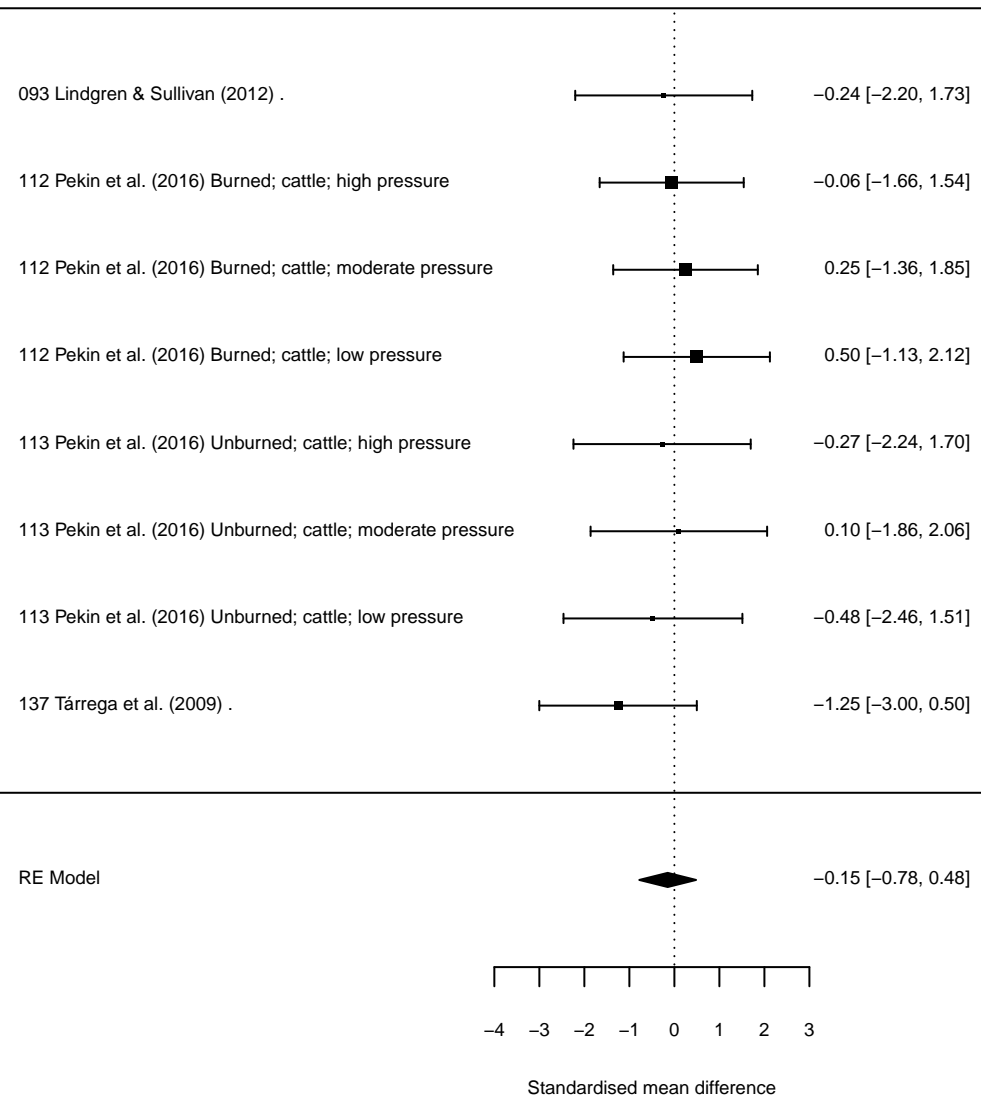
## Woody species richness, native ungulates



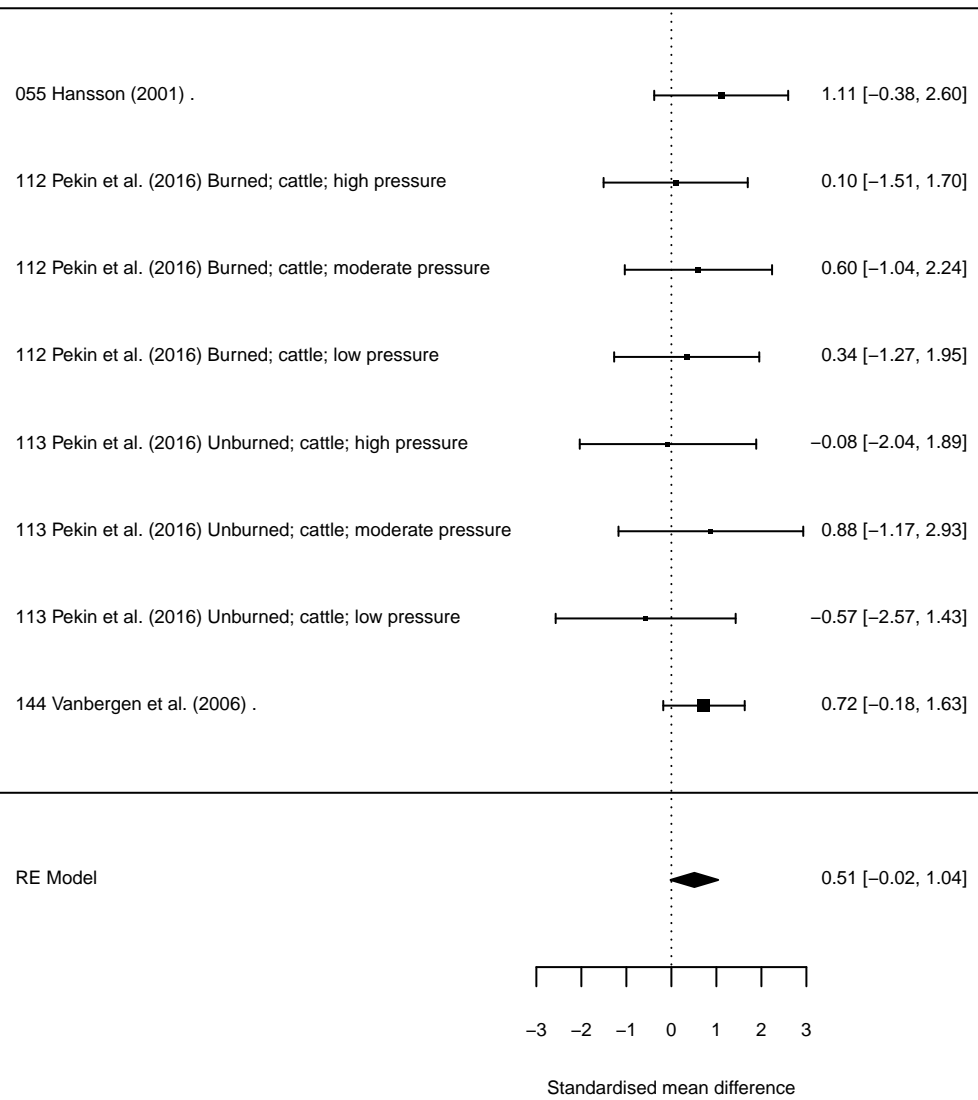
## Woody species richness, introduced ungulates



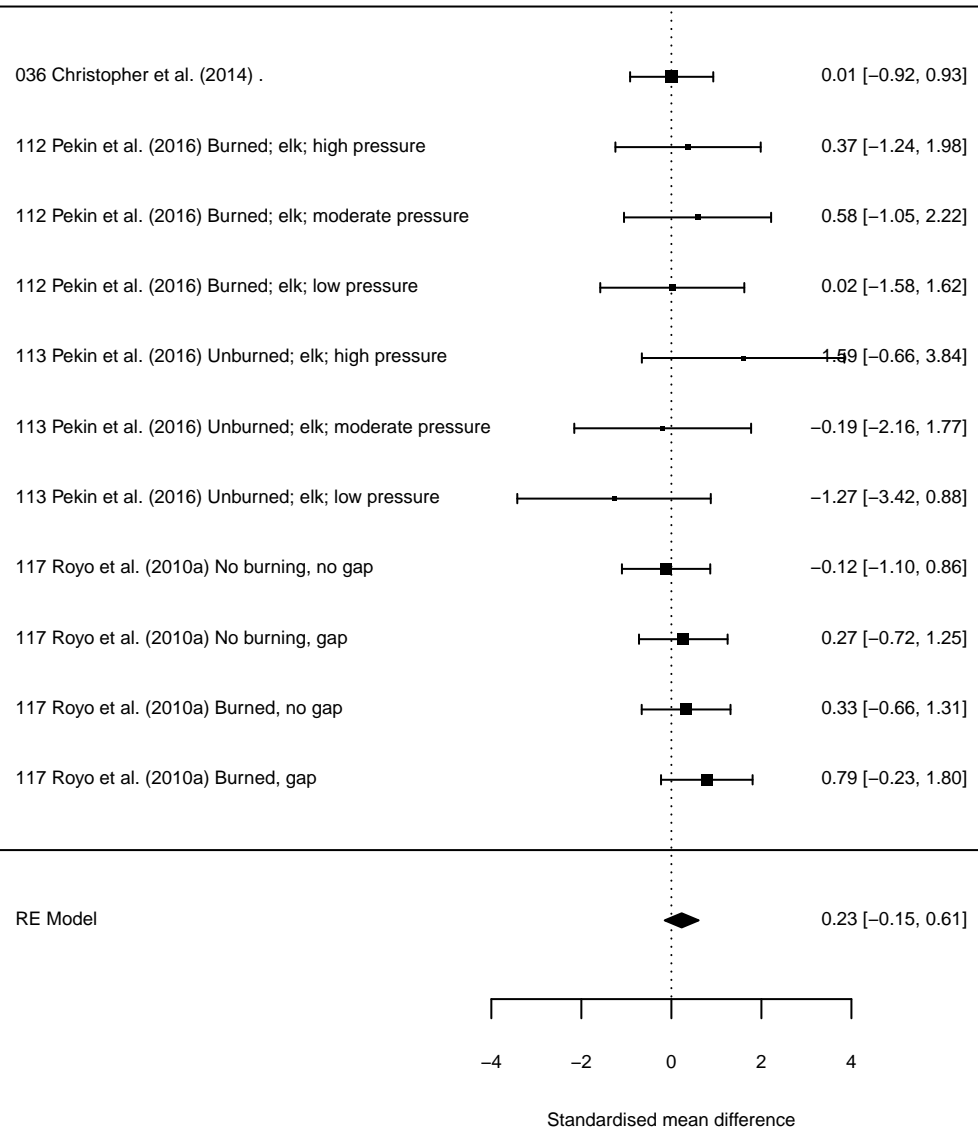
## Woody species richness, domestic ungulates



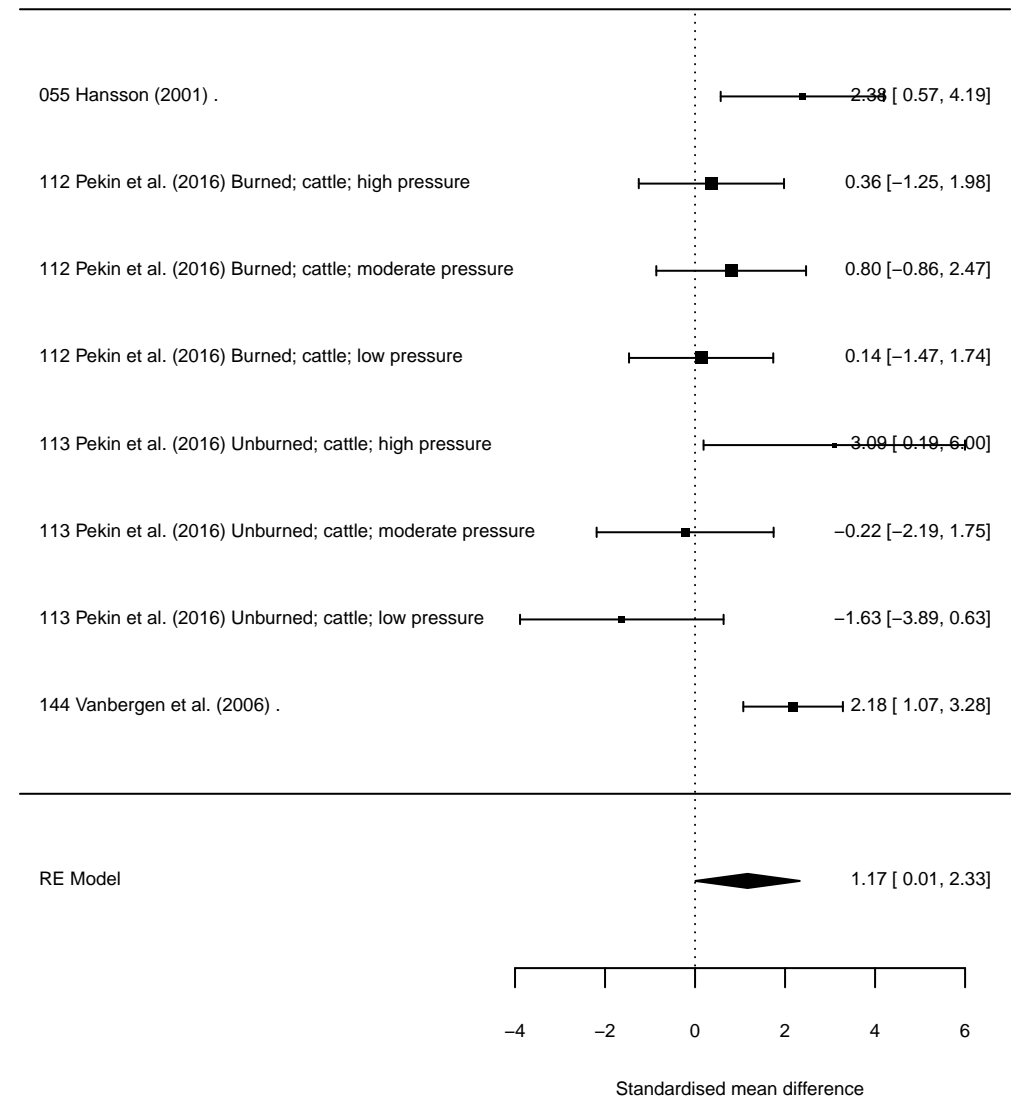
## Graminoid species richness, domestic ungulates



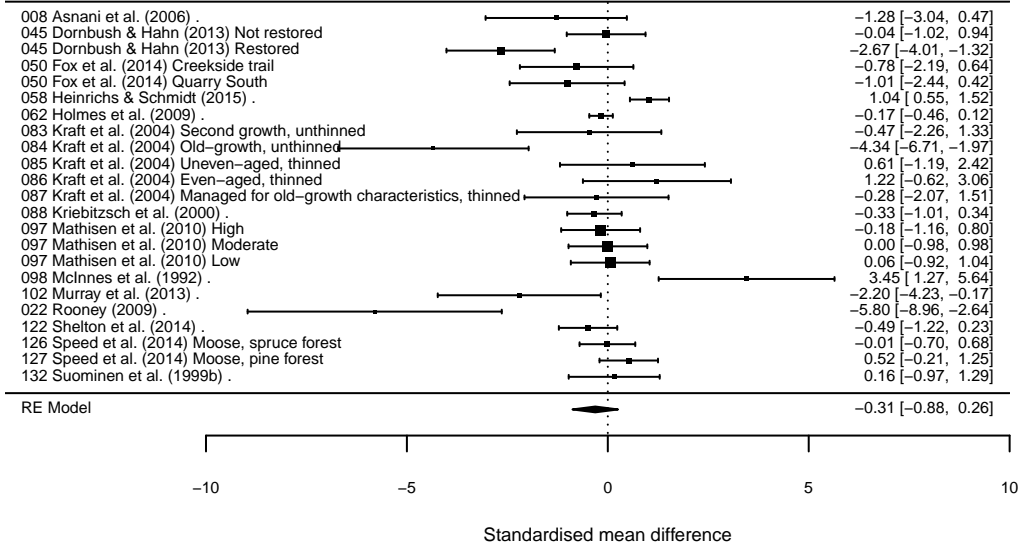
## Forb species richness, native ungulates



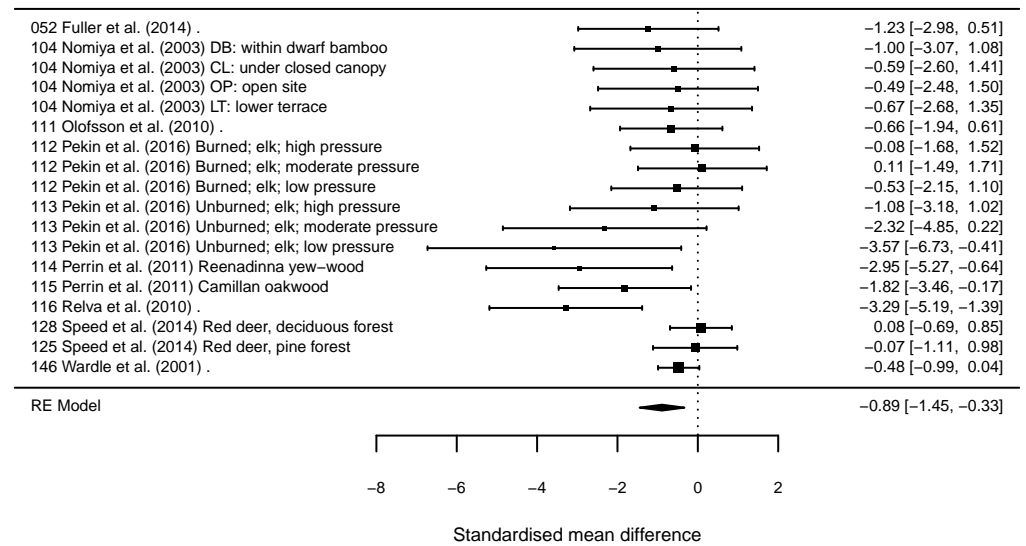
## Forb species richness, domestic ungulates



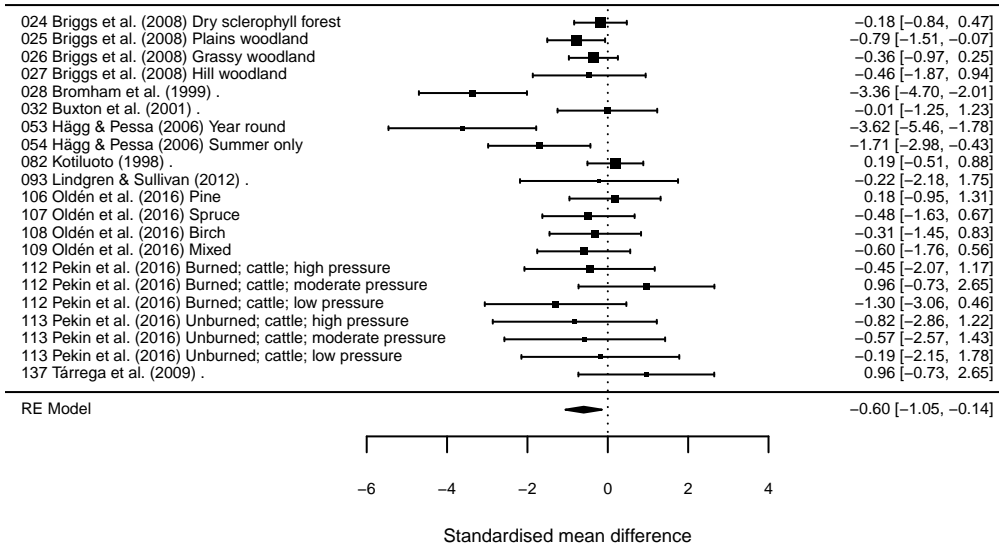
## Understorey abundance, browsers



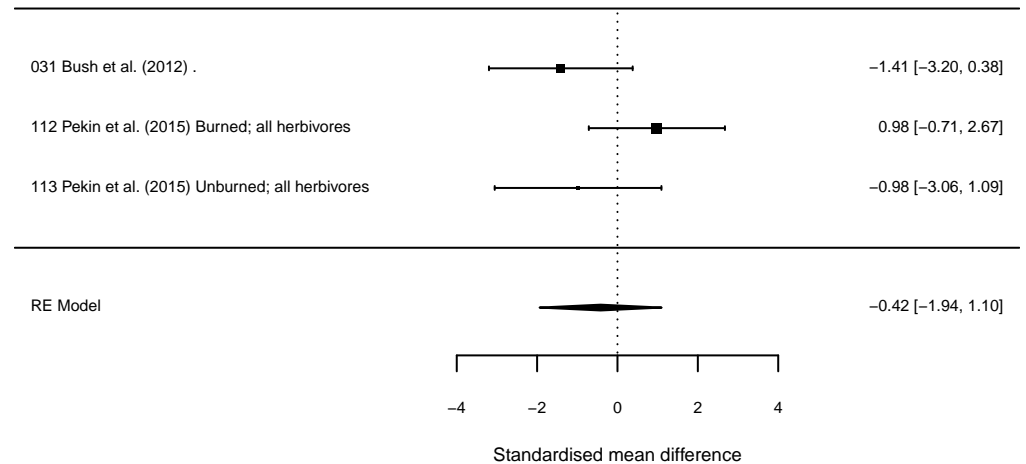
## Understorey abundance, intermediate grazers/browsers



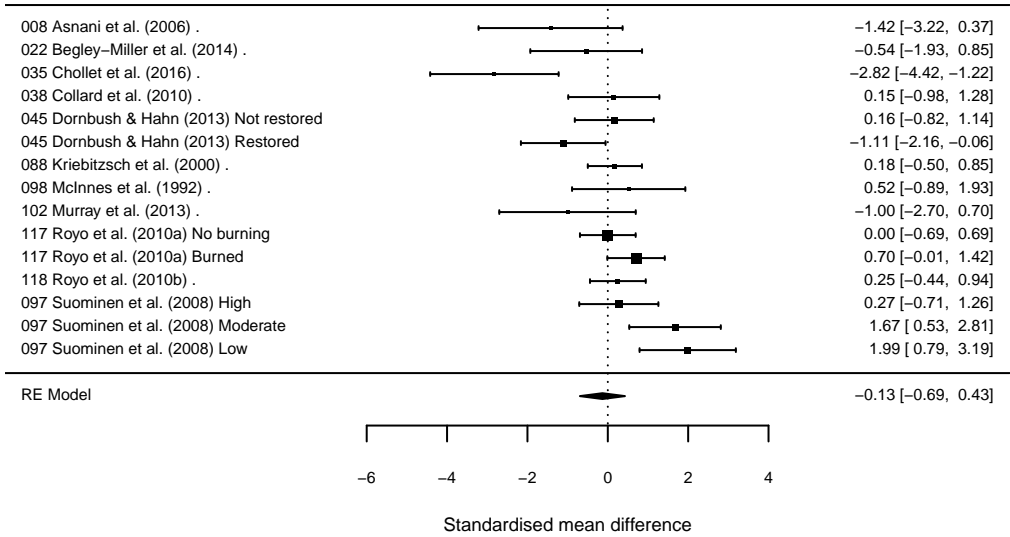
## Understorey abundance, grazers



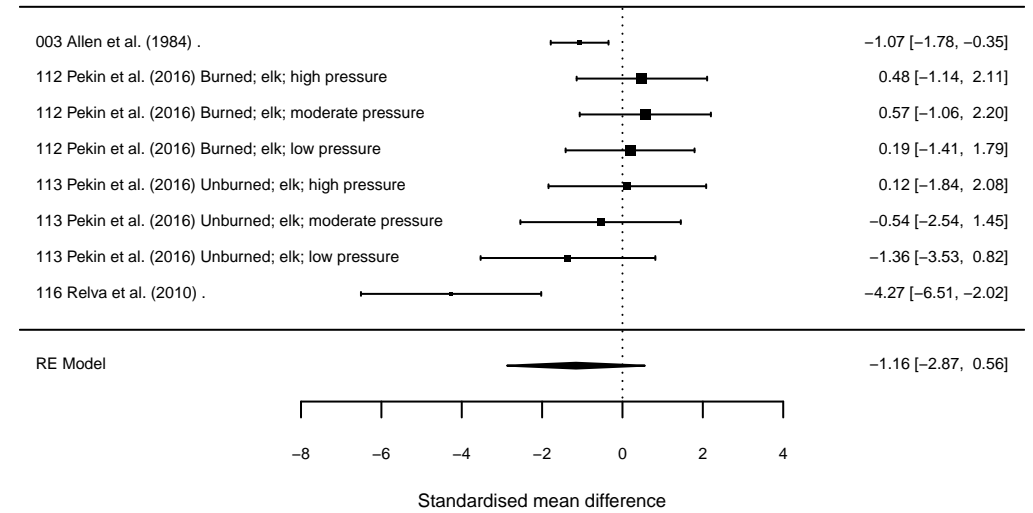
## Understorey abundance, mixed herbivores



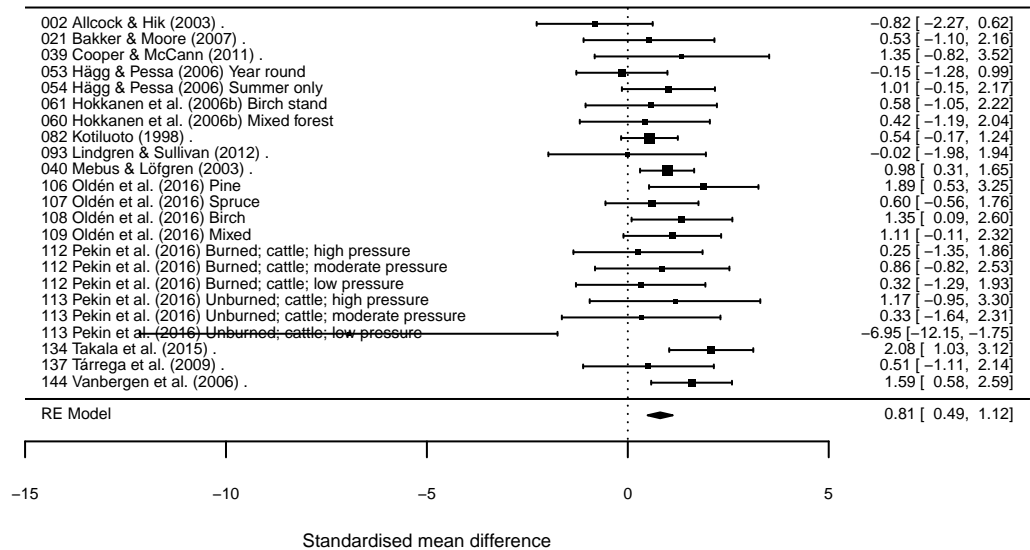
### Understorey species richness, browsers



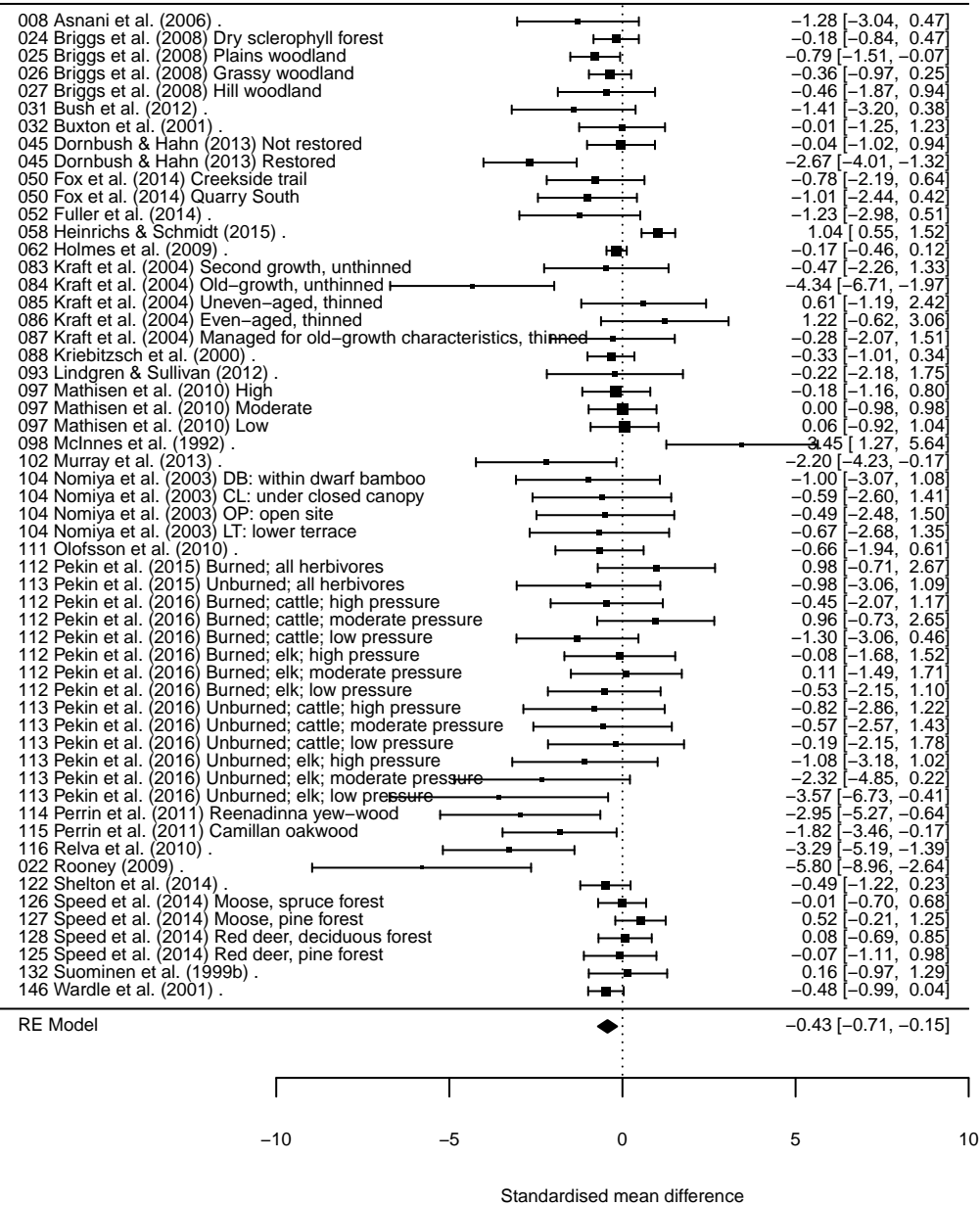
### Understorey species richness, intermediate grazers/browsers



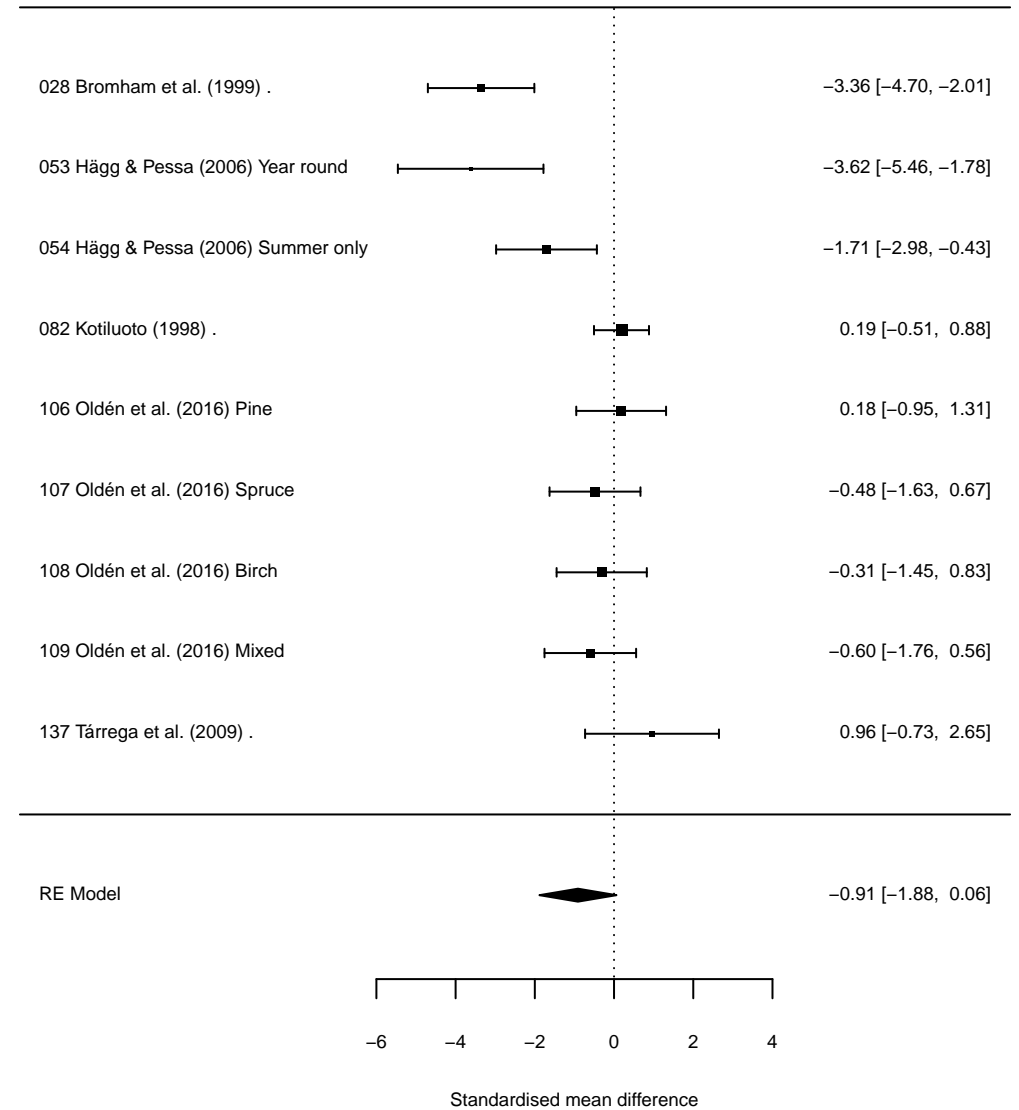
### Understorey species richness, grazers



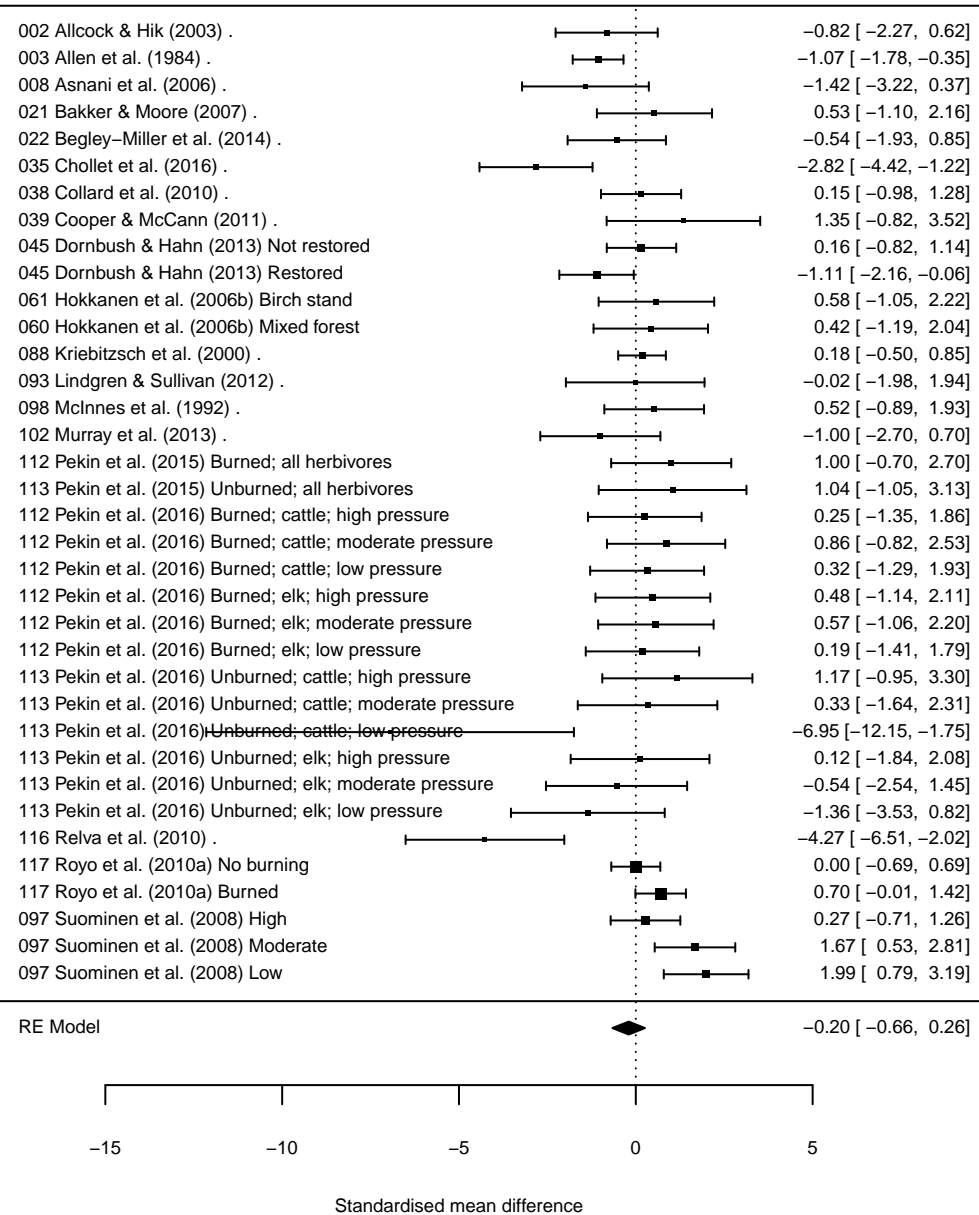
### Understorey abundance, fencing studies



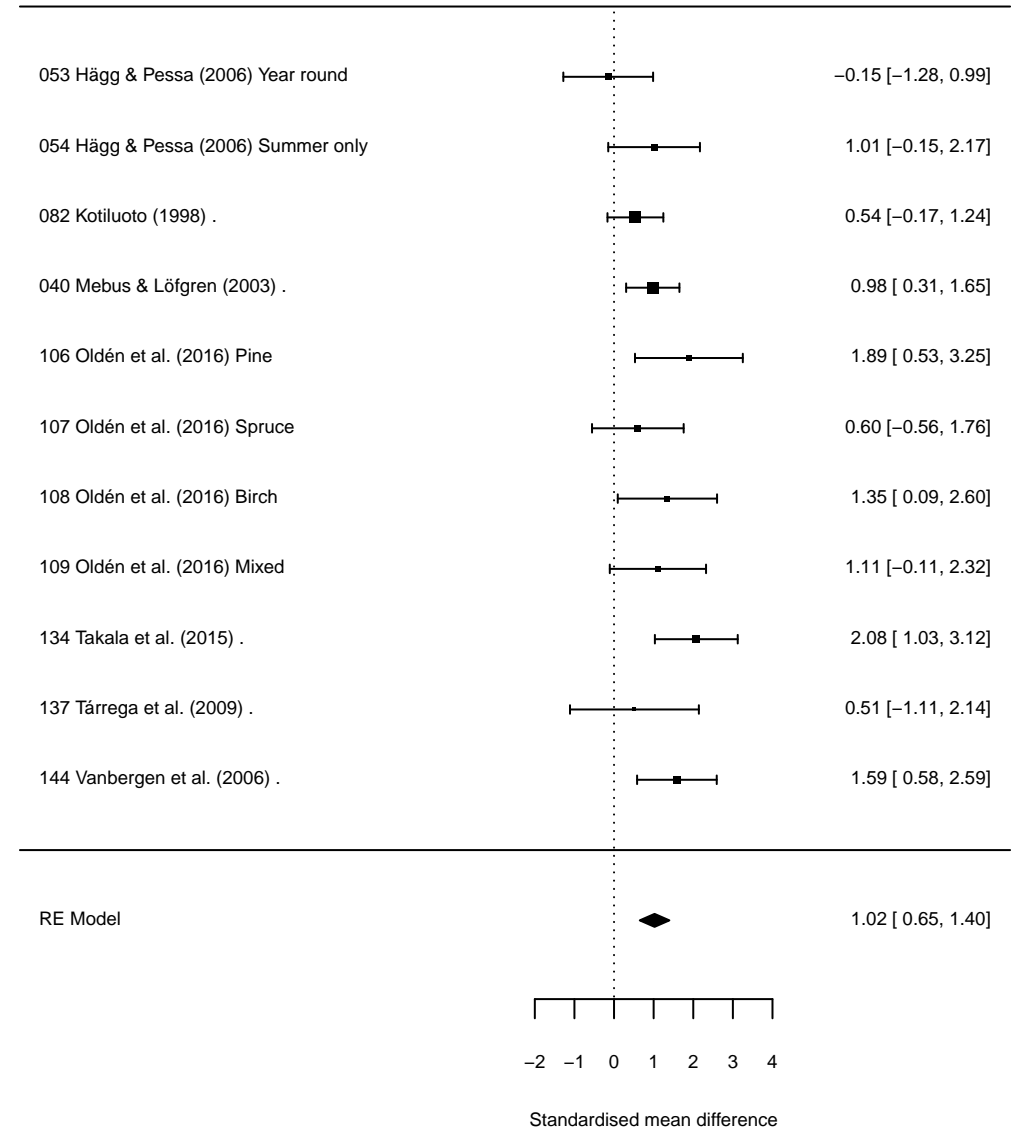
### Understorey abundance, sustained/abandoned/resumed livestock grazing



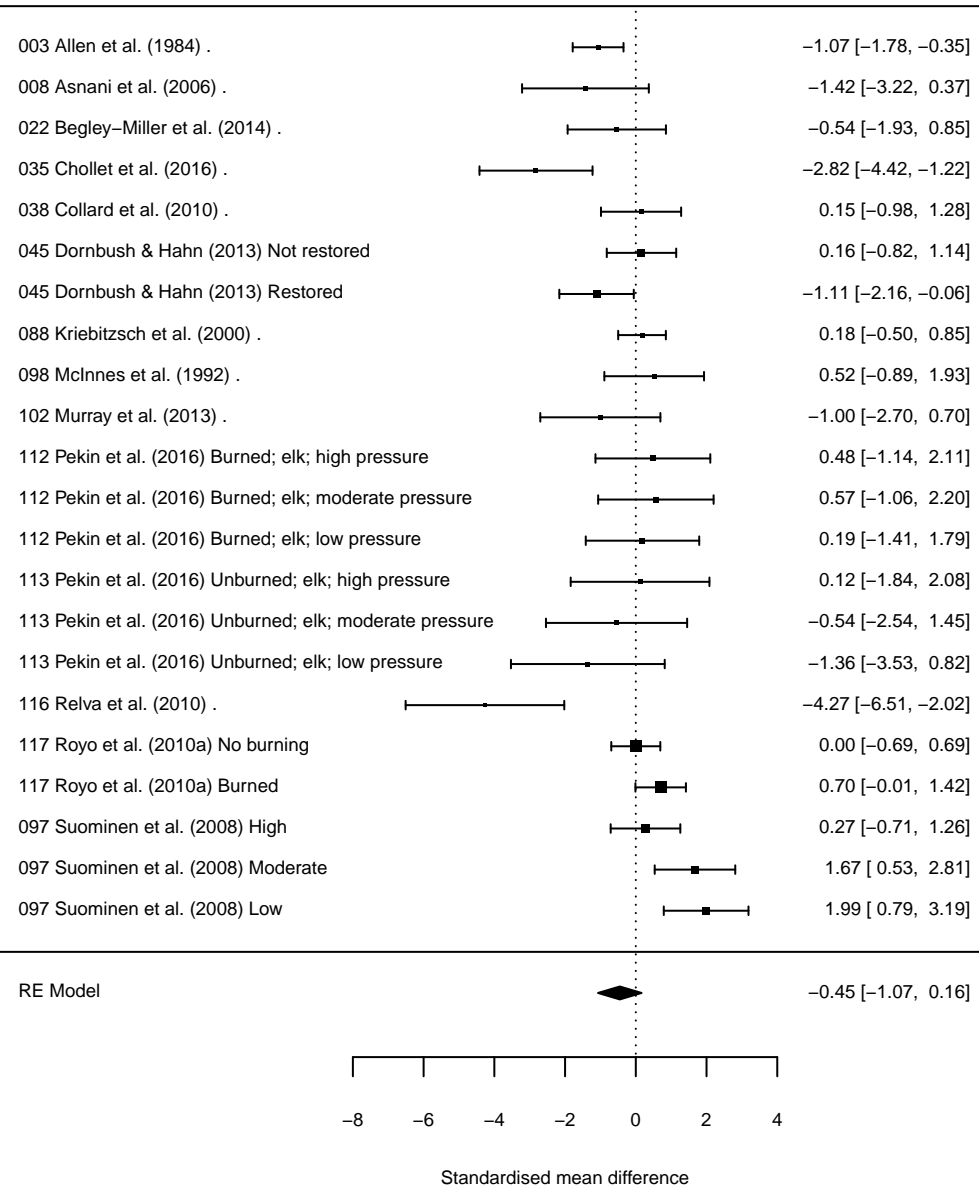
## Understorey species richness, fencing studies



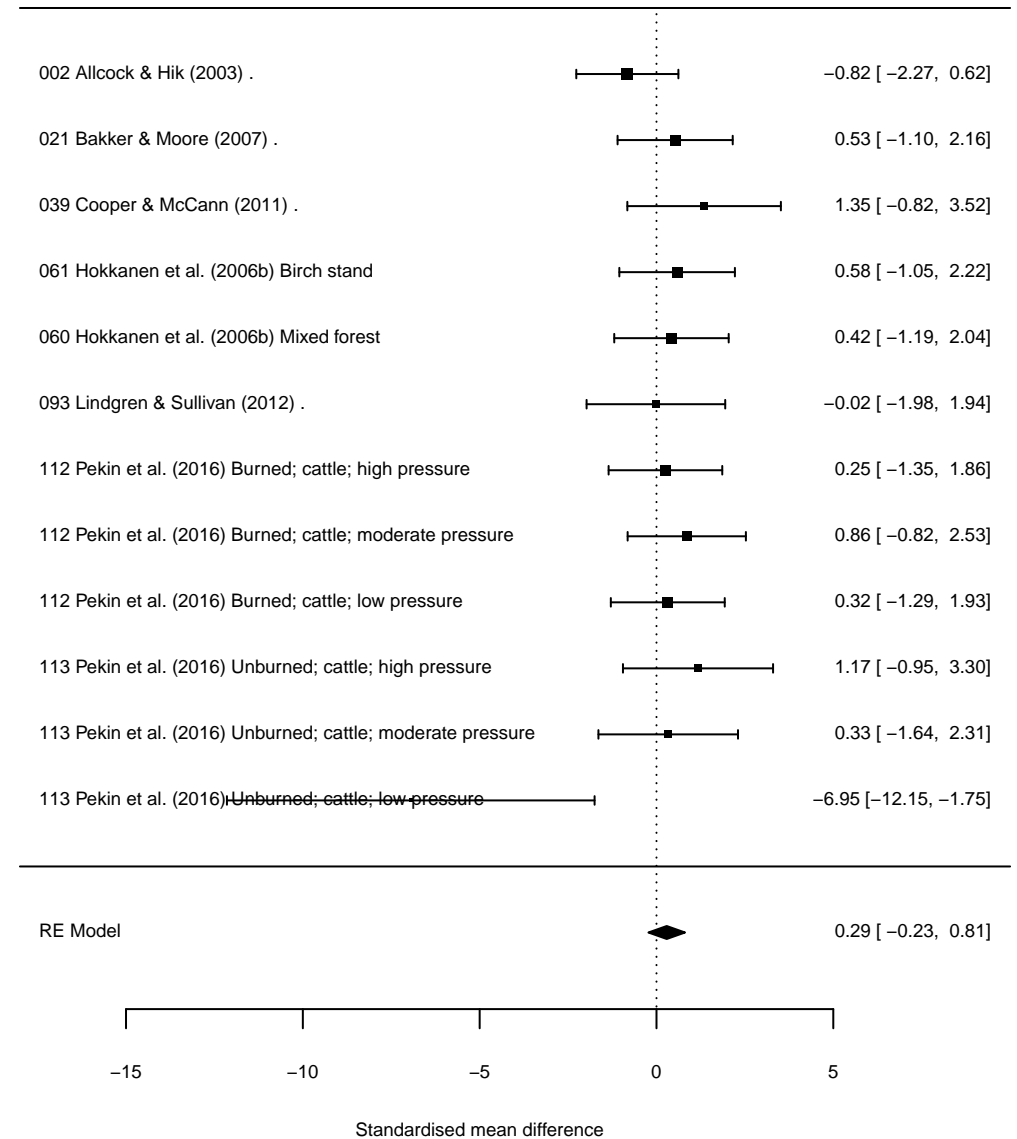
## Understorey species richness, sustained/abandoned/resumed livestock grazing



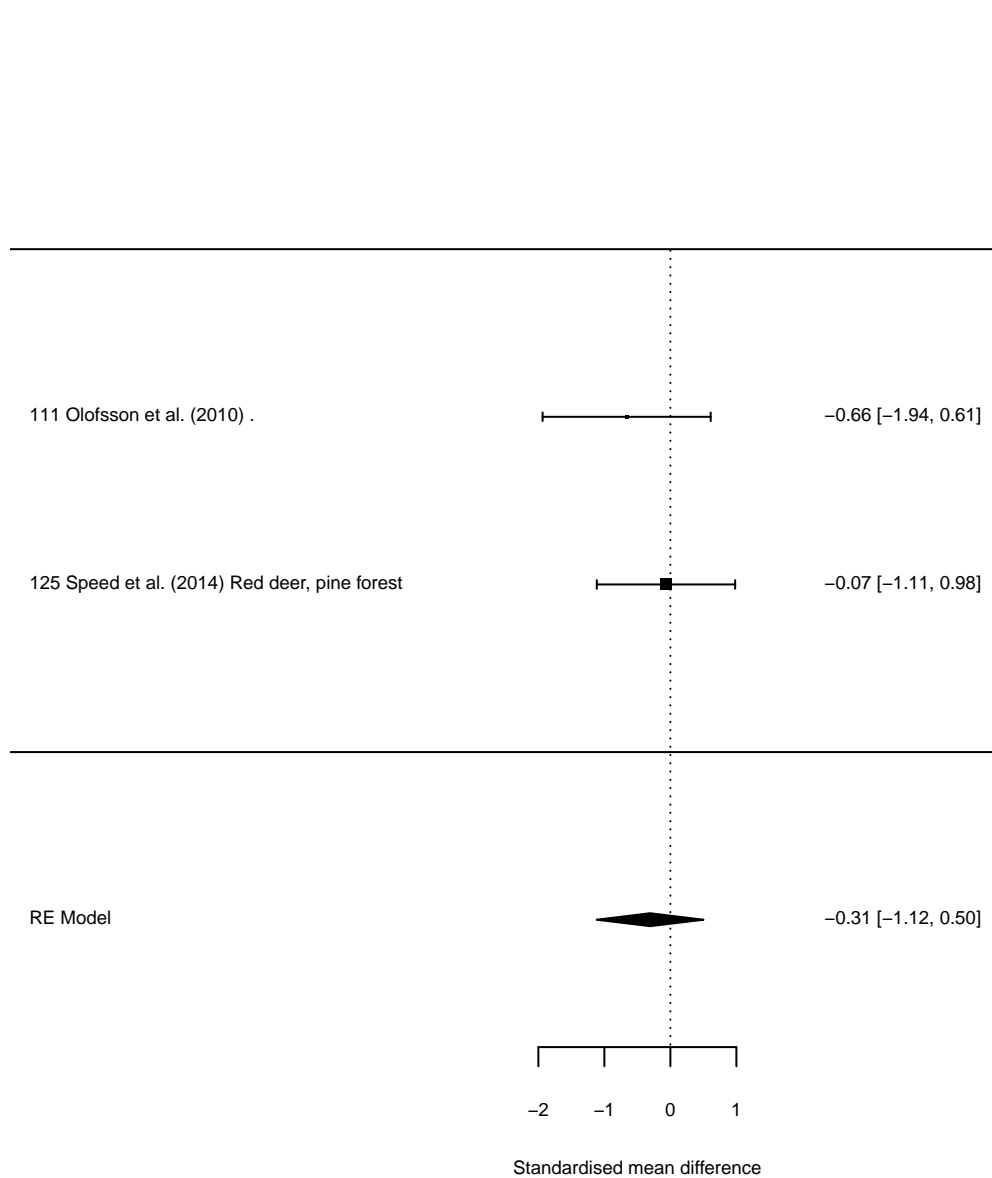
## Understorey species richness, fencing of wild ungulates



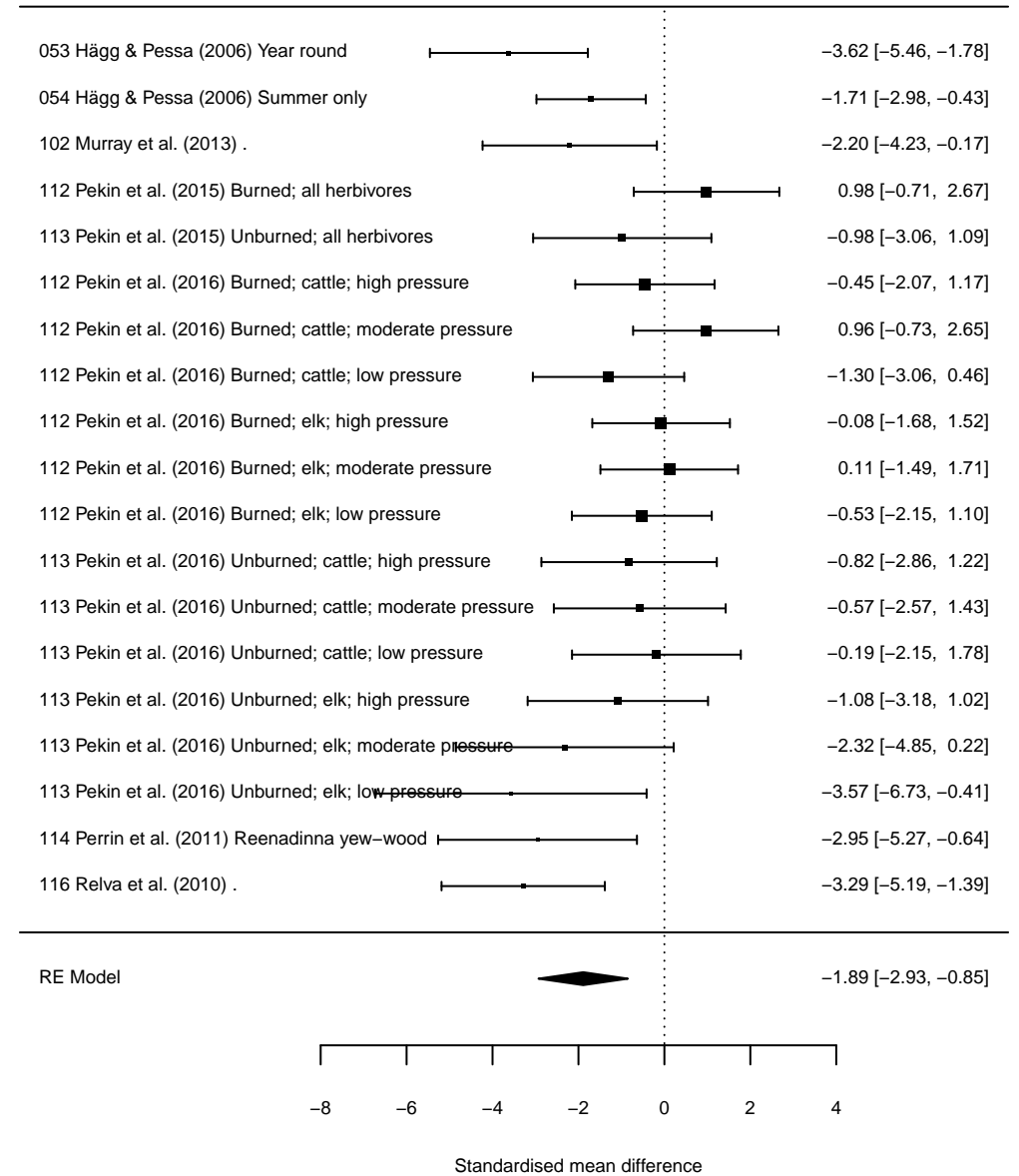
## Understorey species richness, fencing of livestock



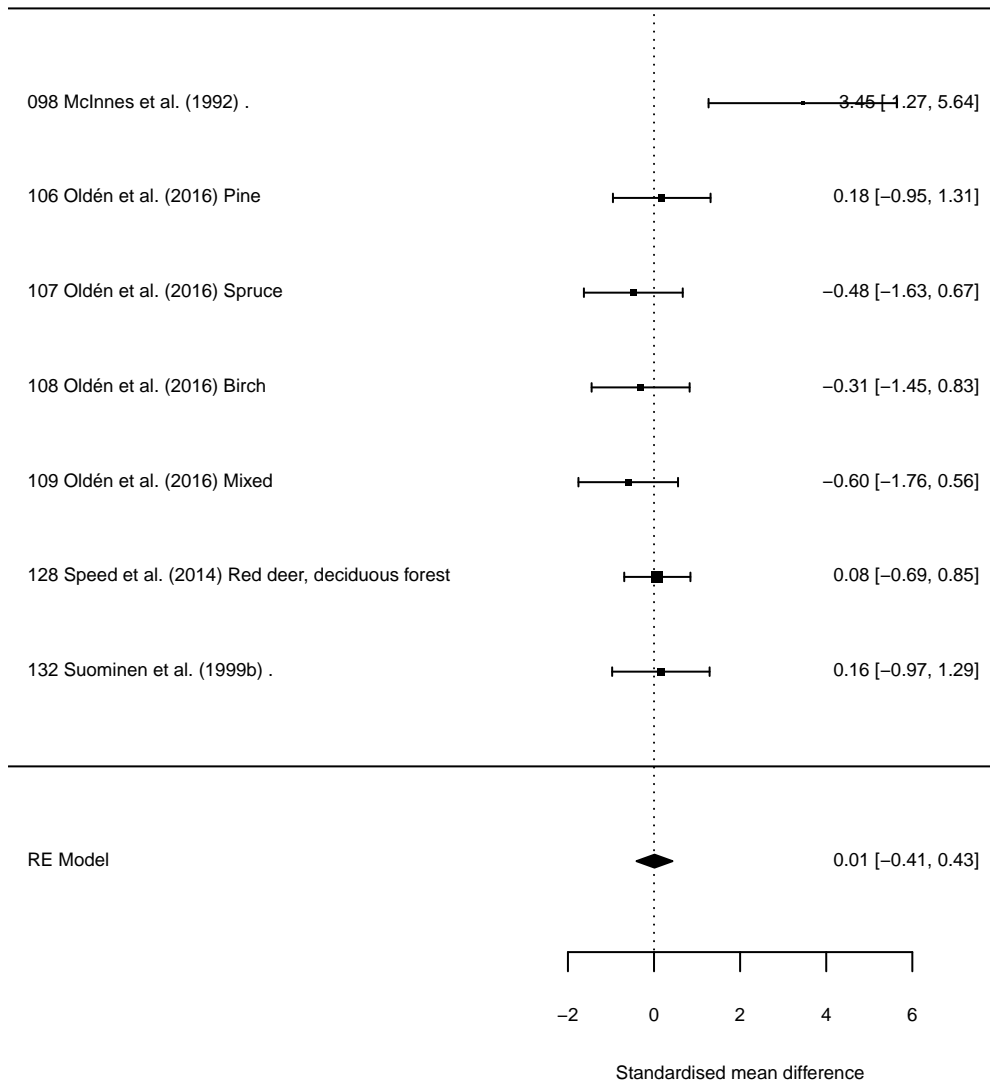
### Understorey abundance, poor-soil forest



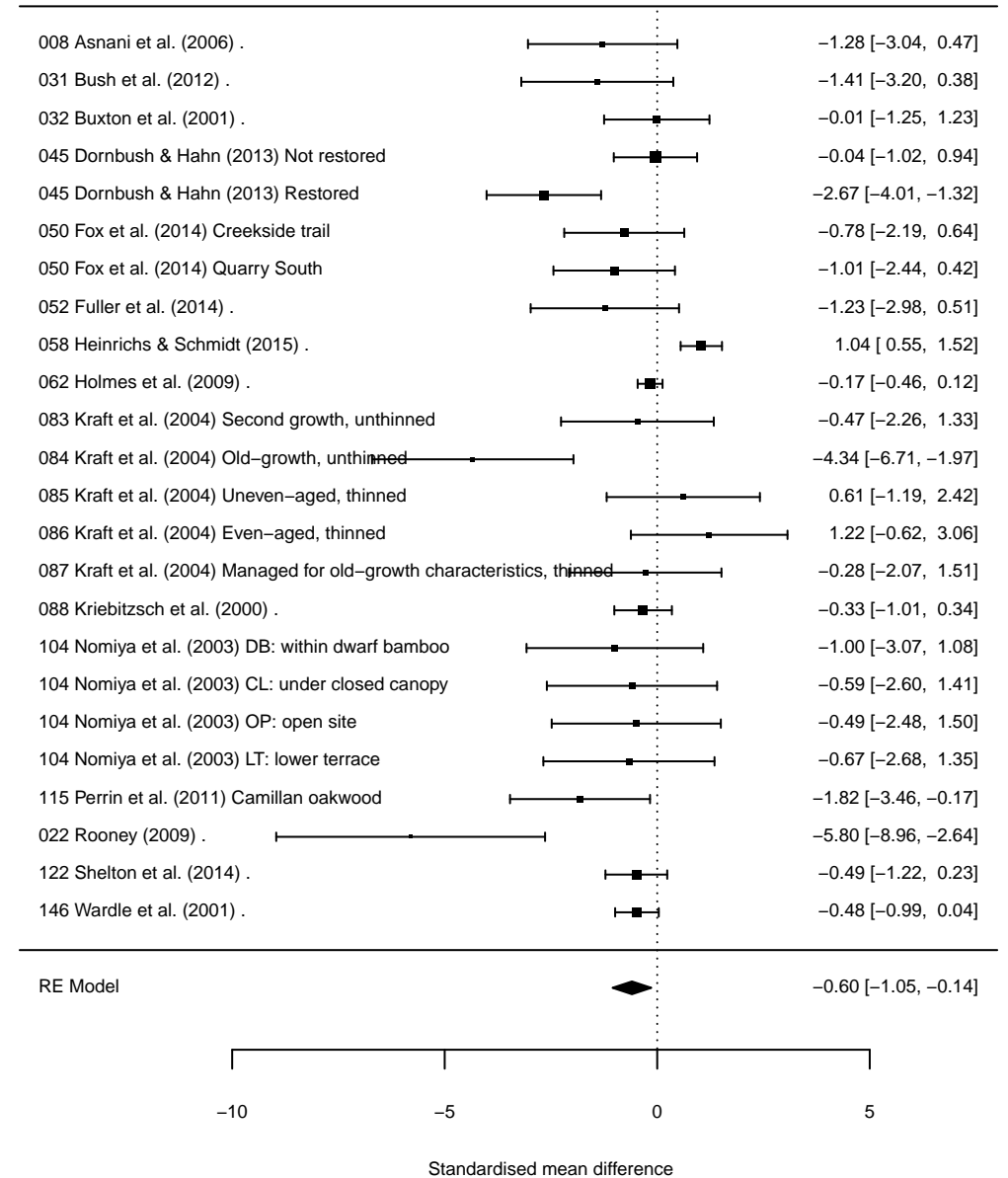
### Understorey abundance, richer-soil conifers



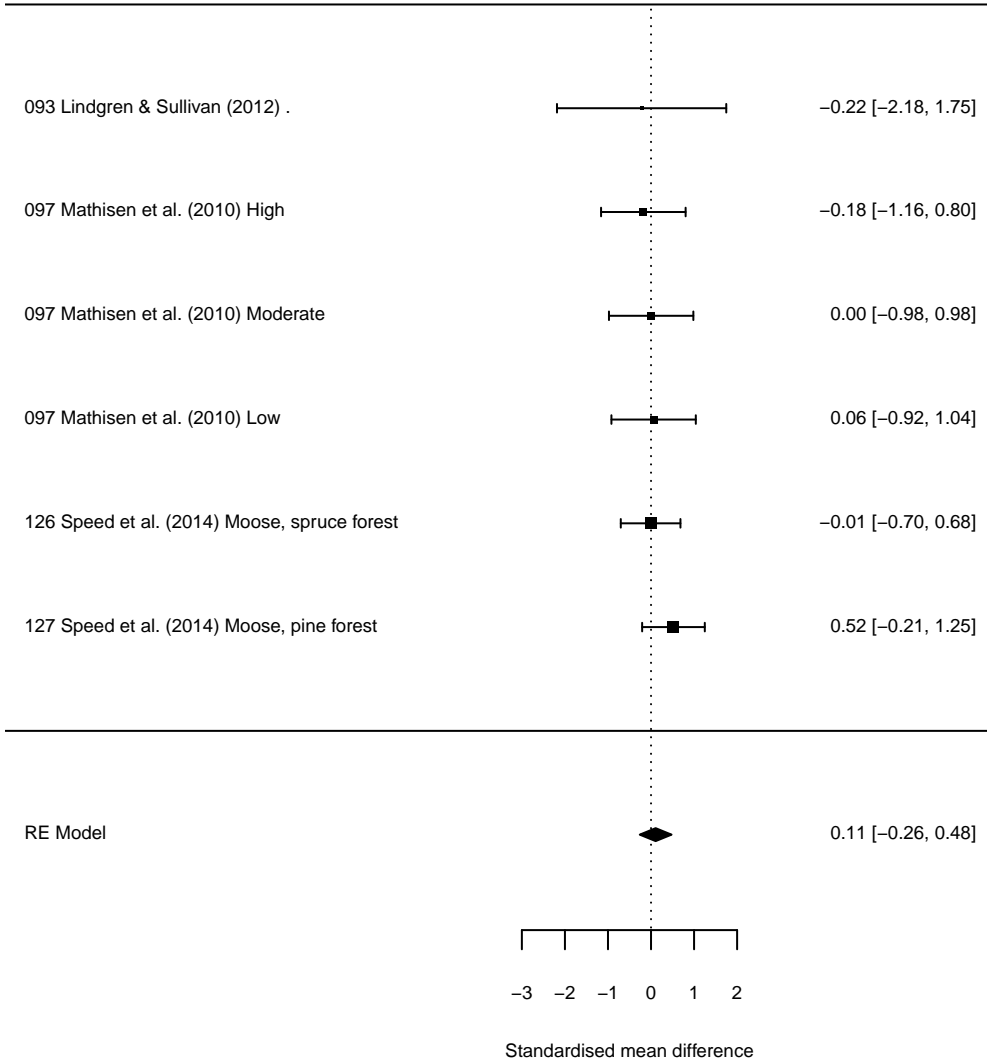
## Understorey abundance, boreal broadleaf/mixed



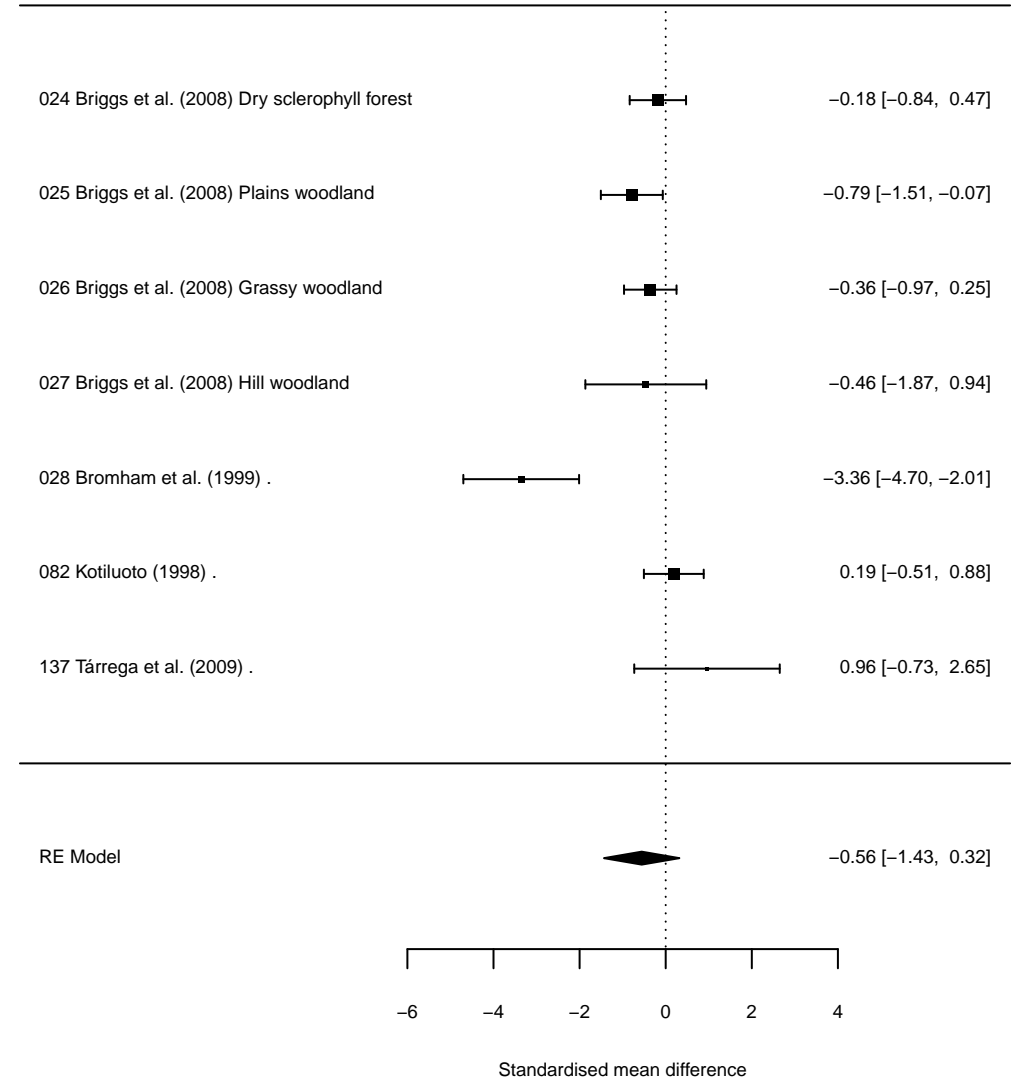
## Understorey abundance, temperate broadleaf/mixed



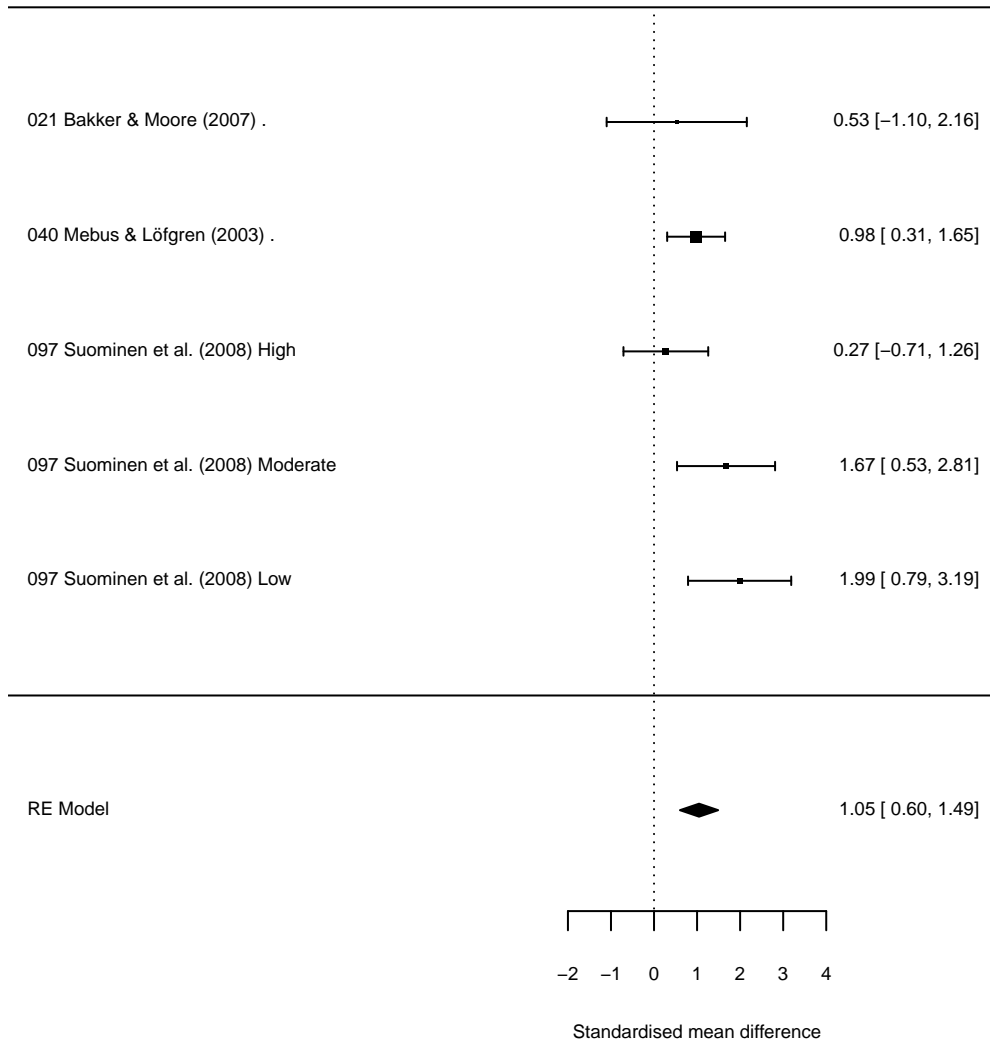
### Understorey abundance, regenerating



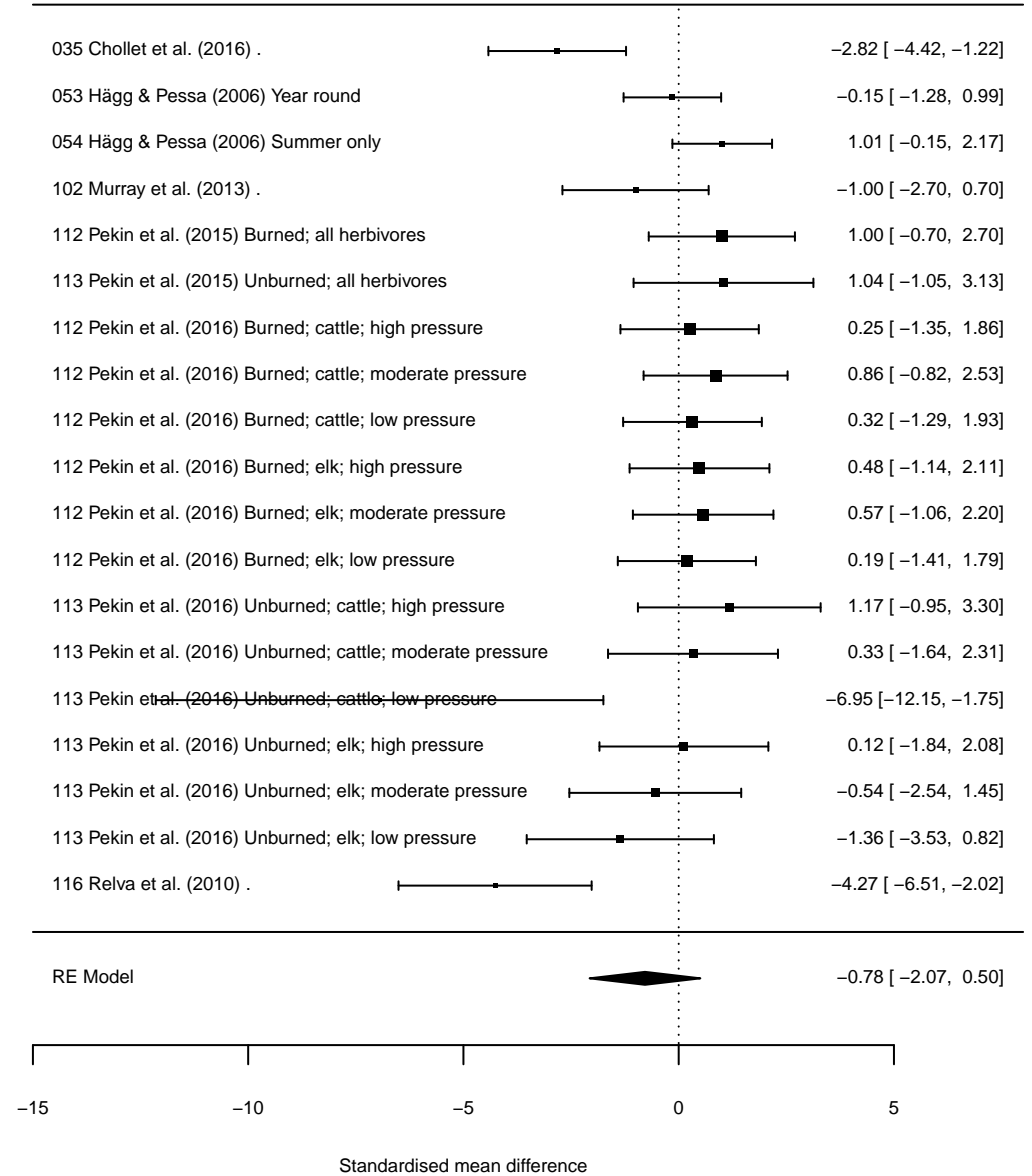
### Understorey abundance, open woodland



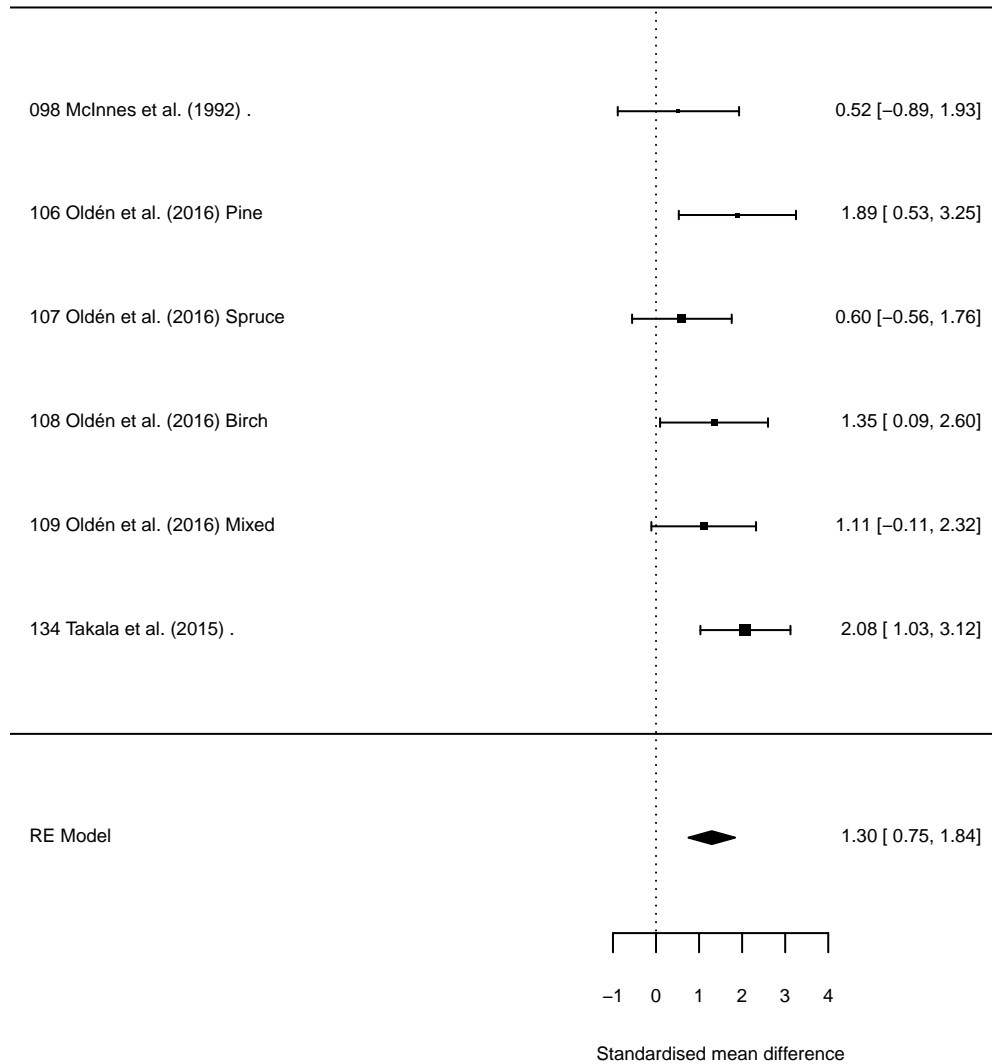
## Understorey species richness, poor-soil forest



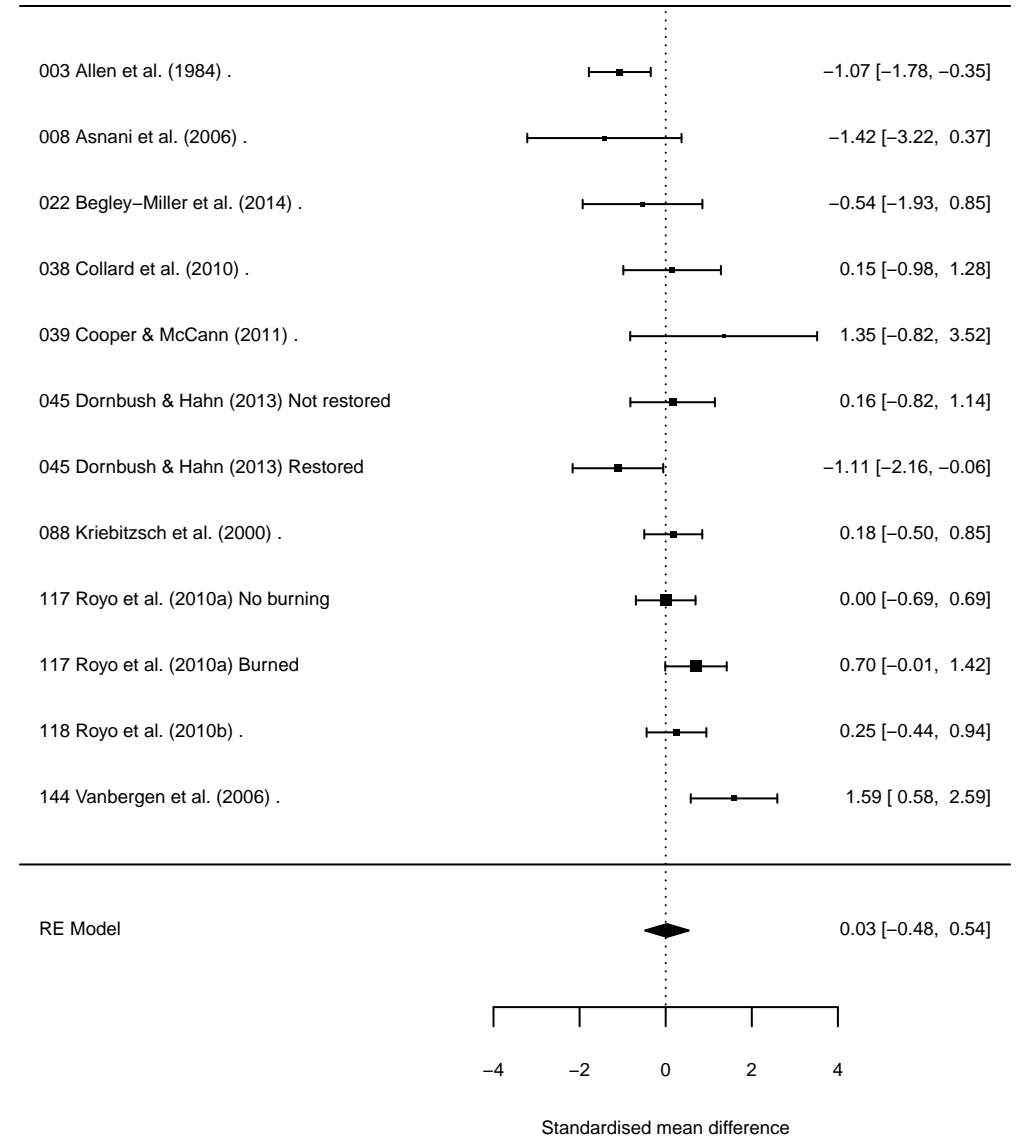
## Understorey species richness, richer-soil conifers



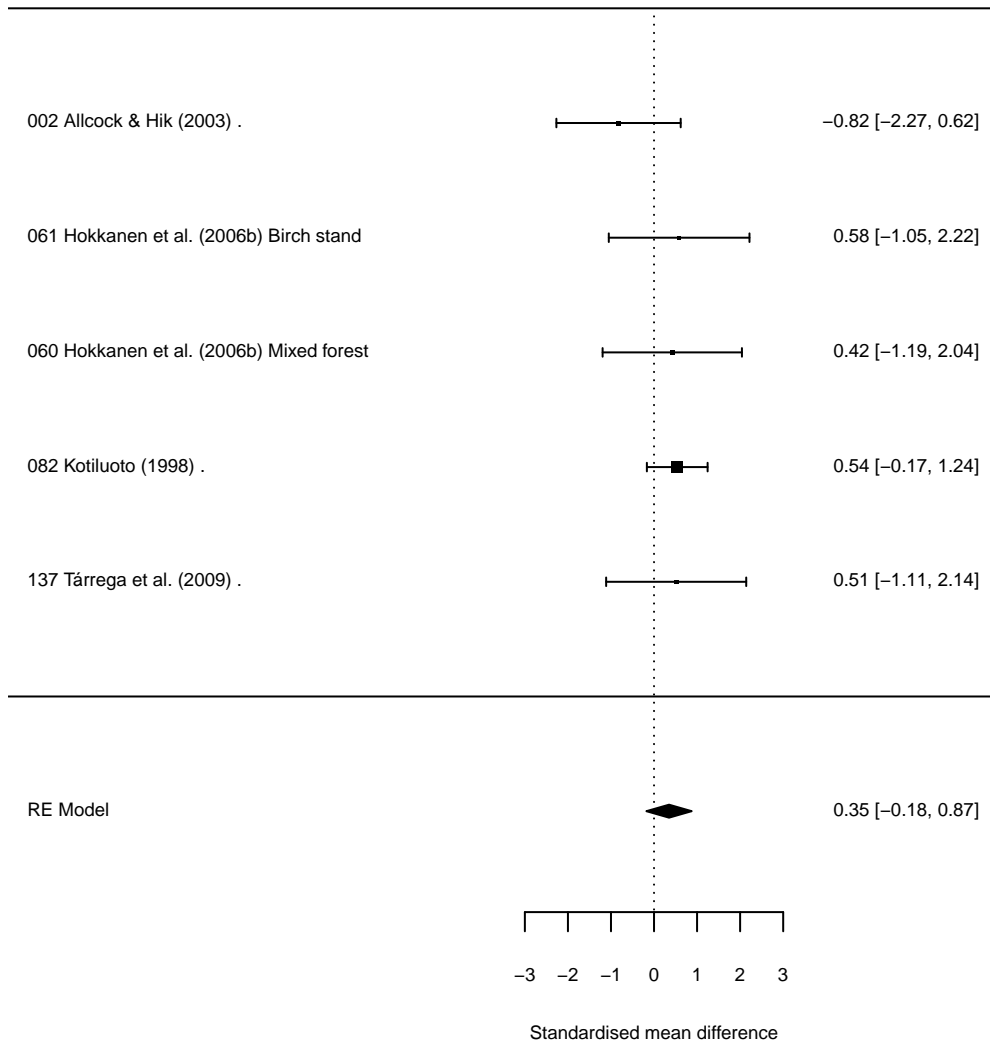
### Understorey species richness, boreal broadleaf/mixed



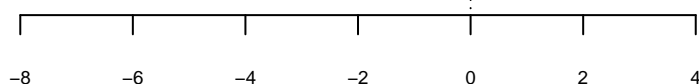
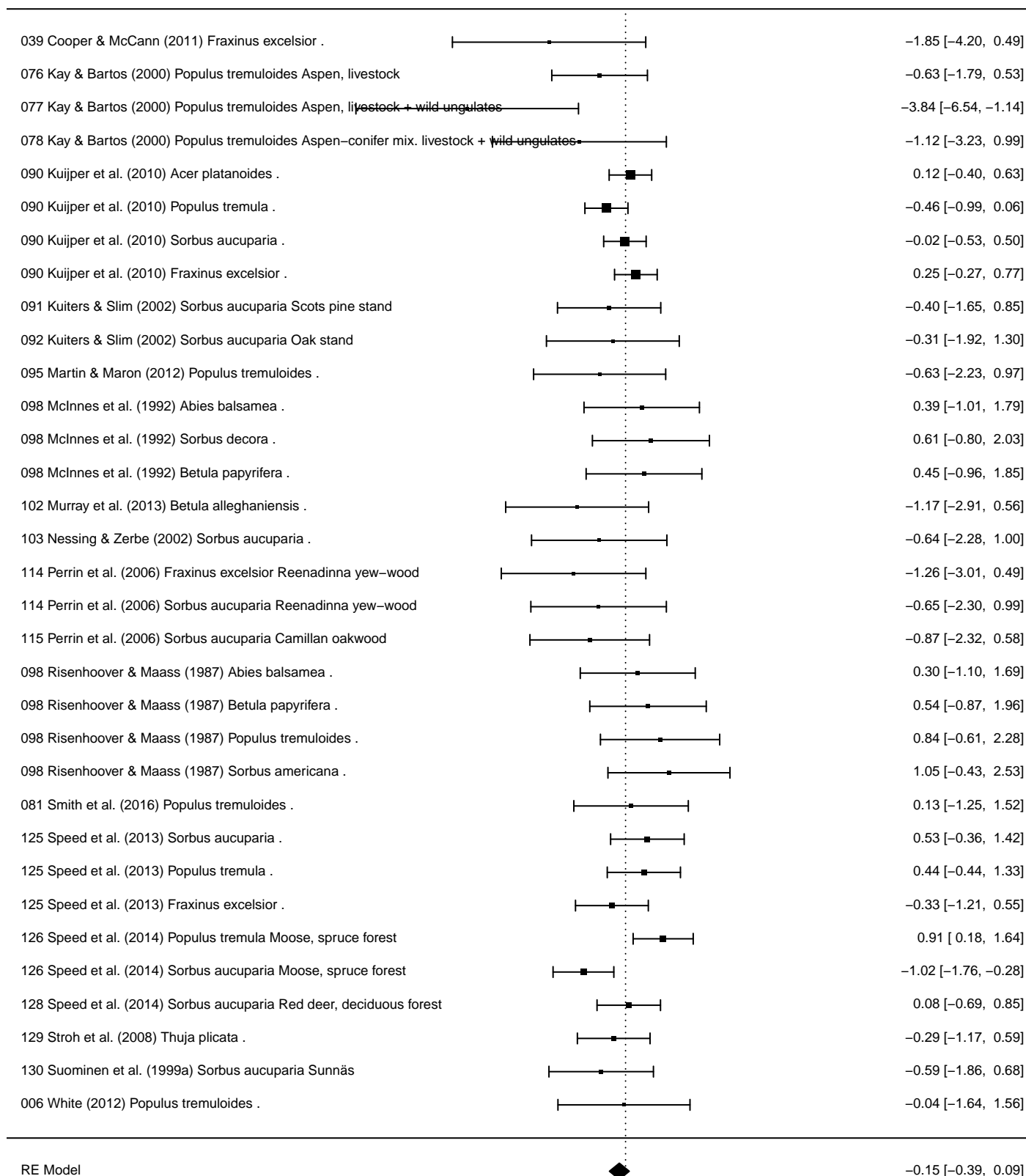
### Understorey species richness, temperate broadleaf/mixed



## Understorey species richness, open woodland

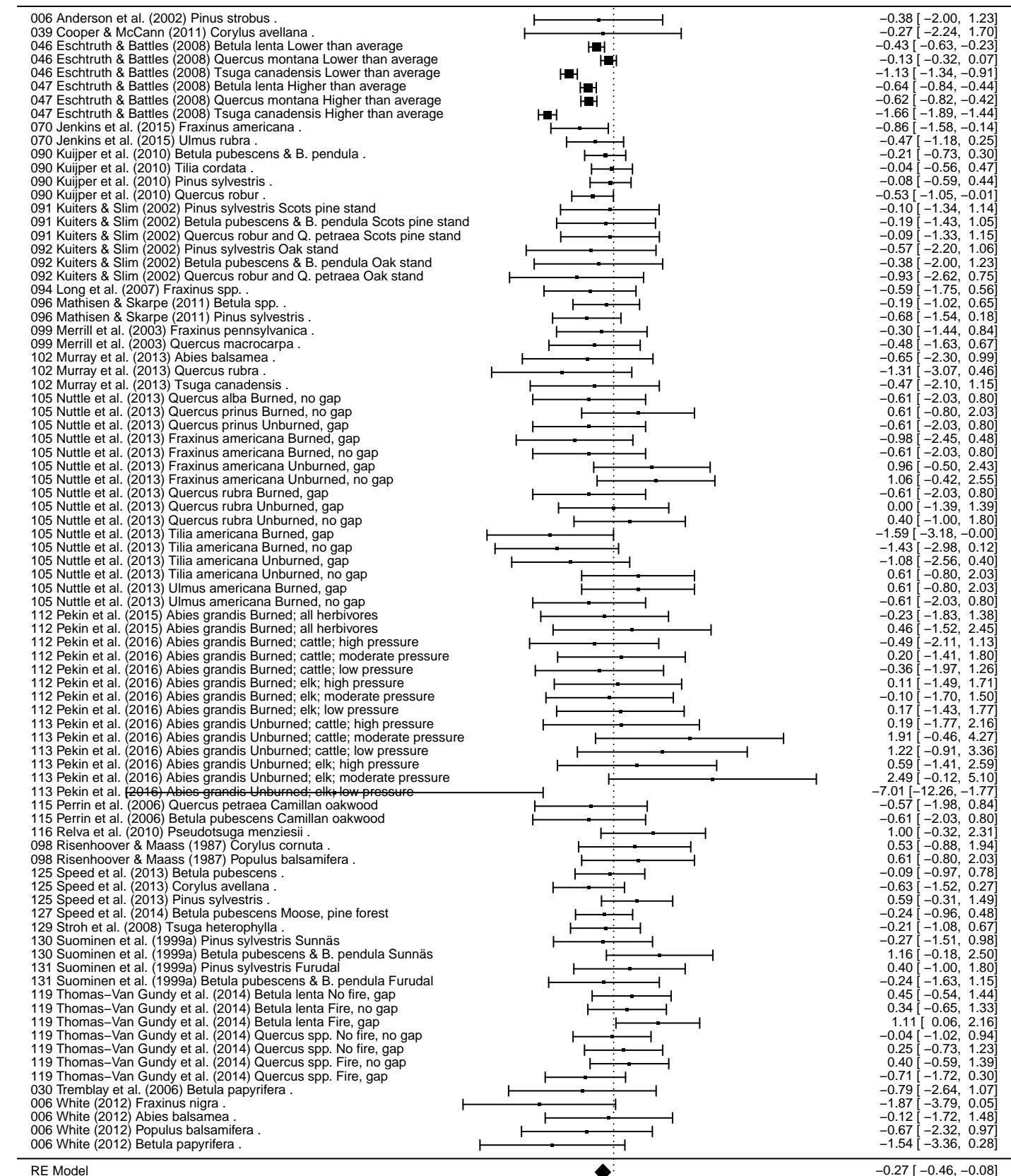


## Sapling abundance, high palatability (best estimate)



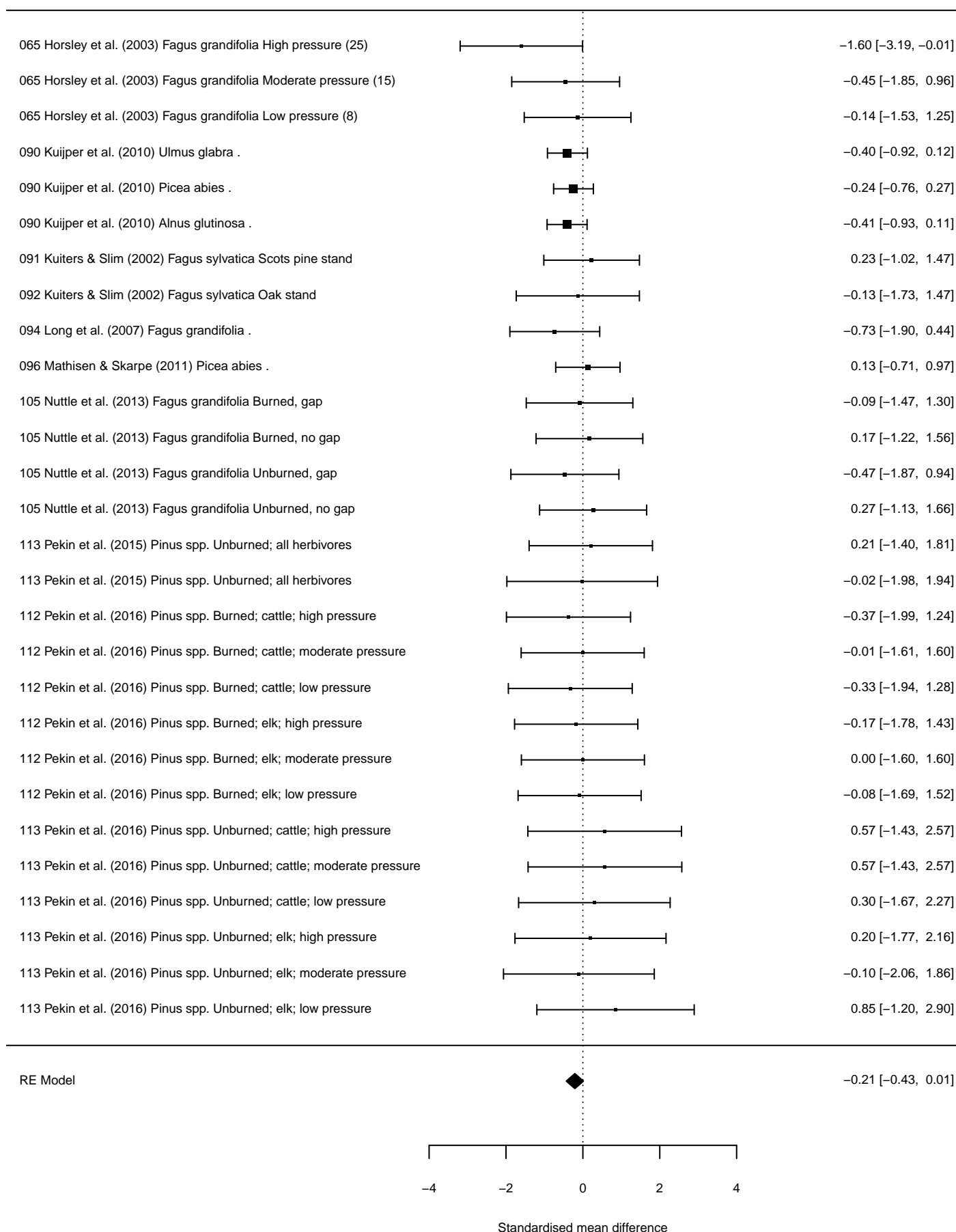
Standardised mean difference

## Sapling abundance, medium palatability (best estimate)

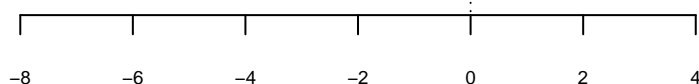
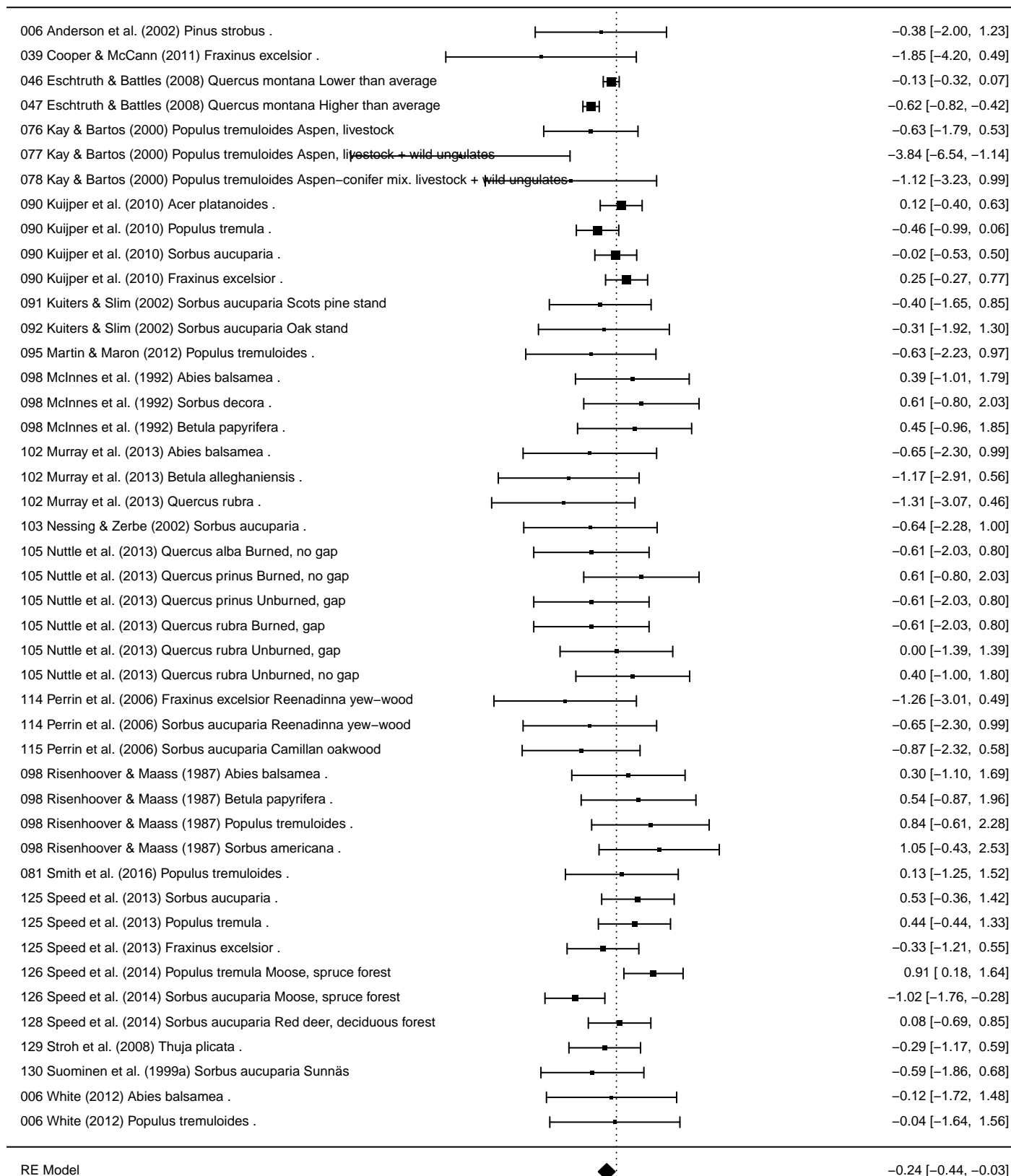


Standardised mean difference

## Sapling abundance, low palatability (best estimate)

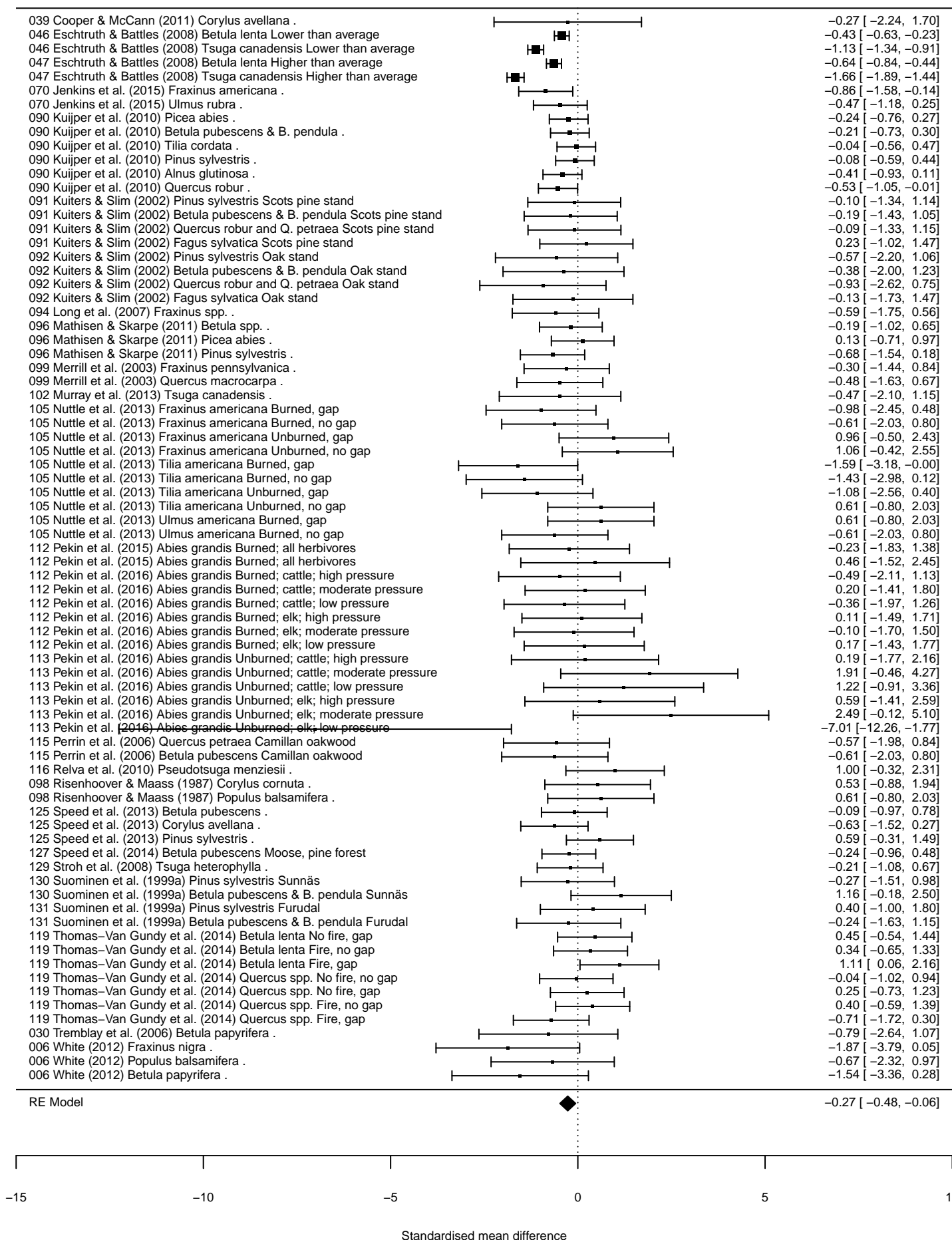


## Sapling abundance, high palatability (highest estimate)

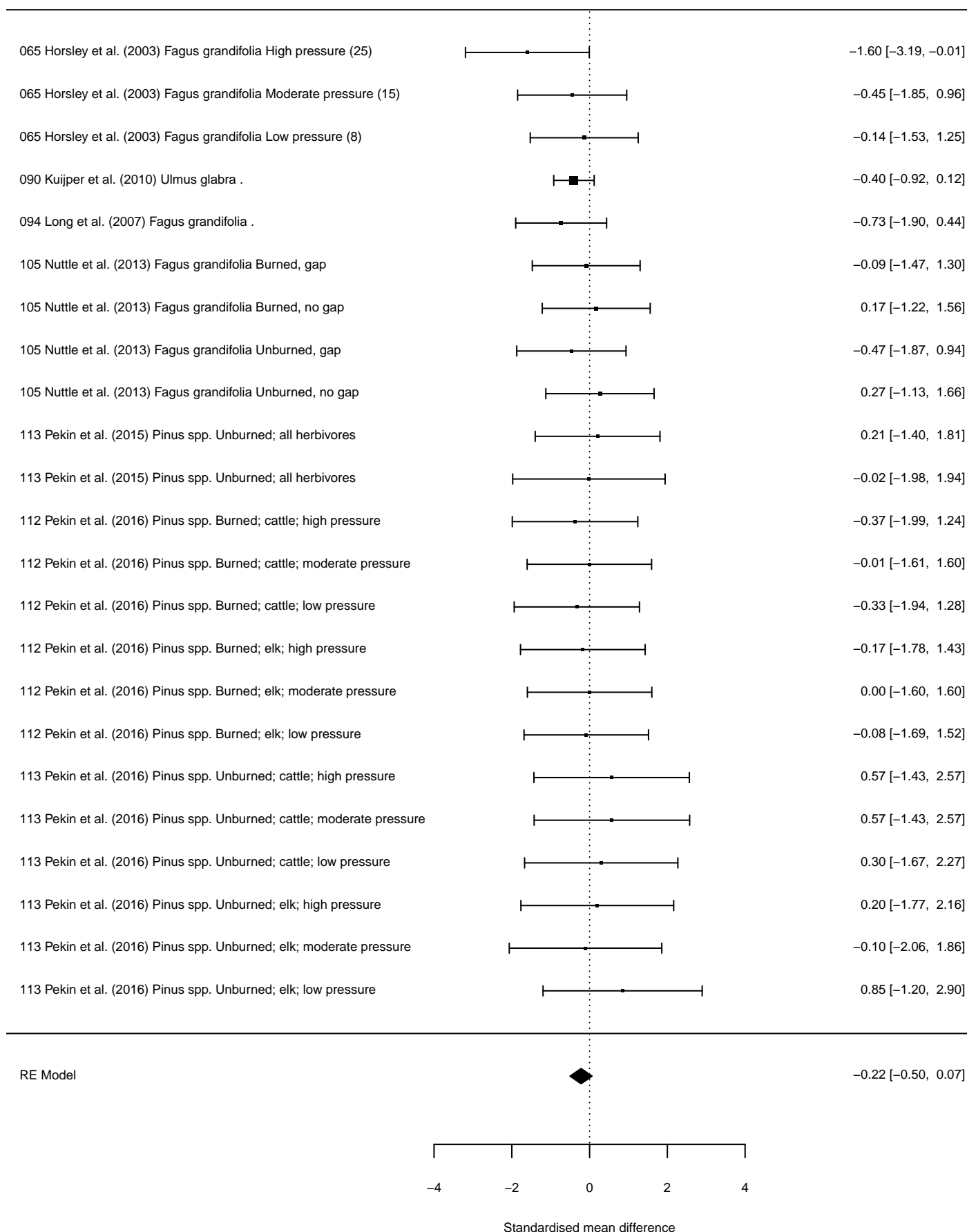


Standardised mean difference

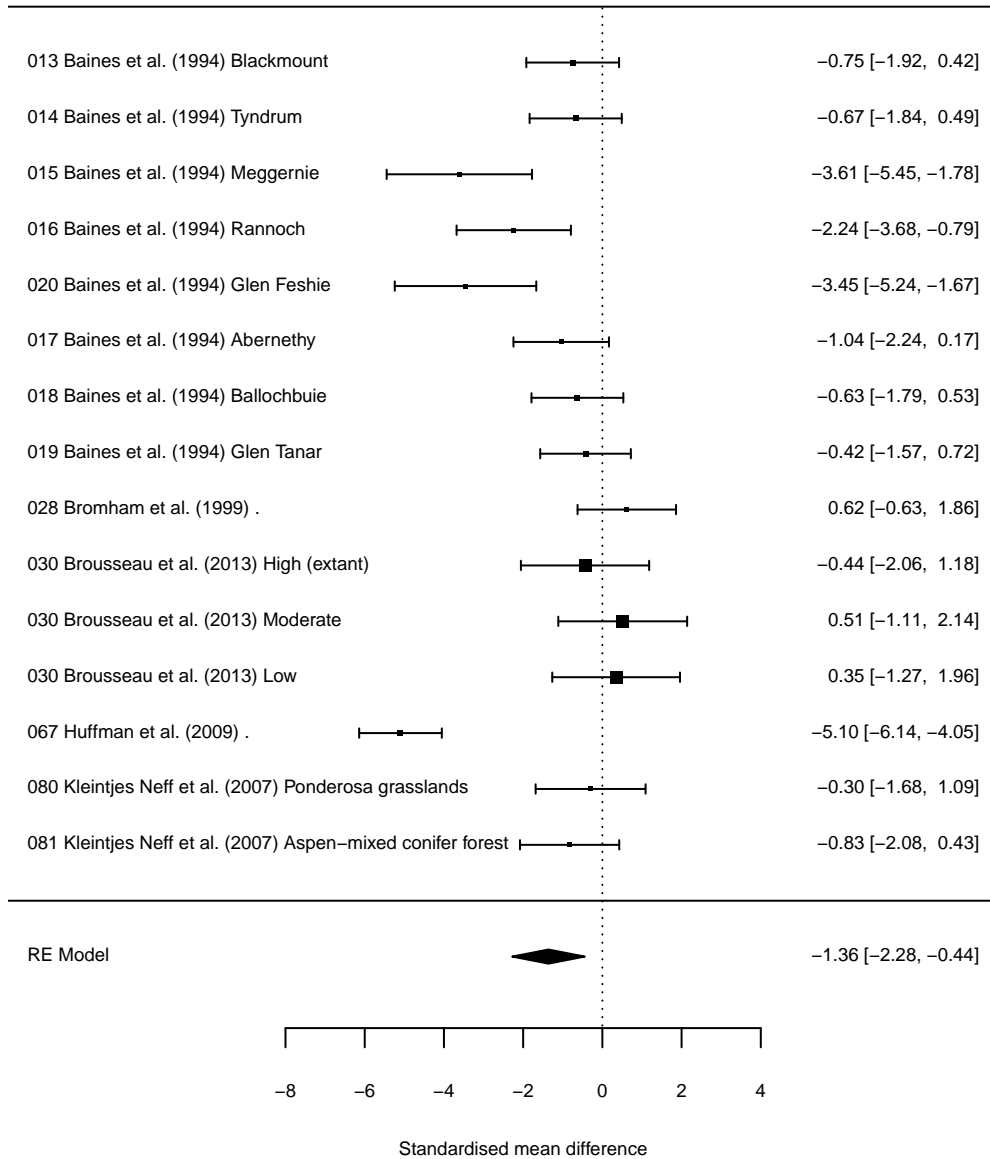
## Sapling abundance, medium palatability (highest estimate)



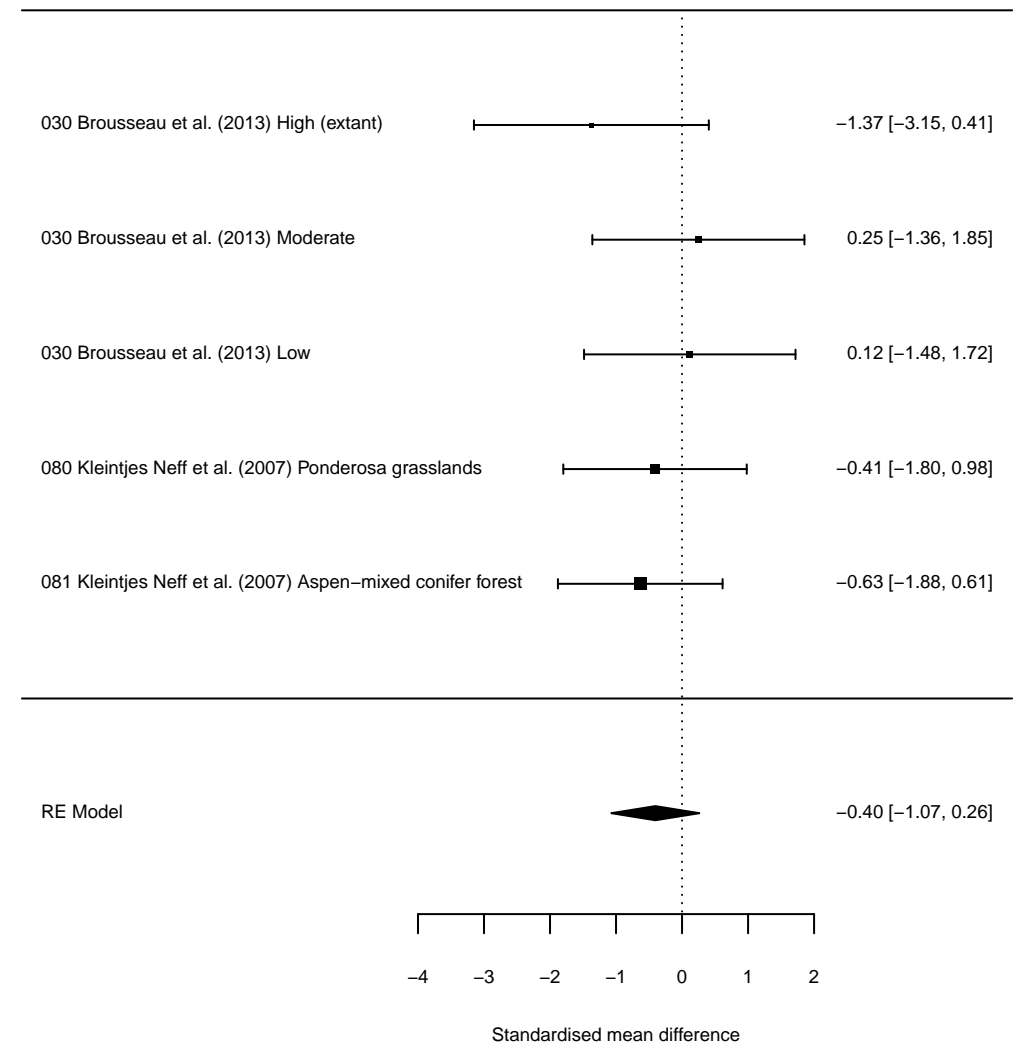
## Sapling abundance, low palatability (highest estimate)



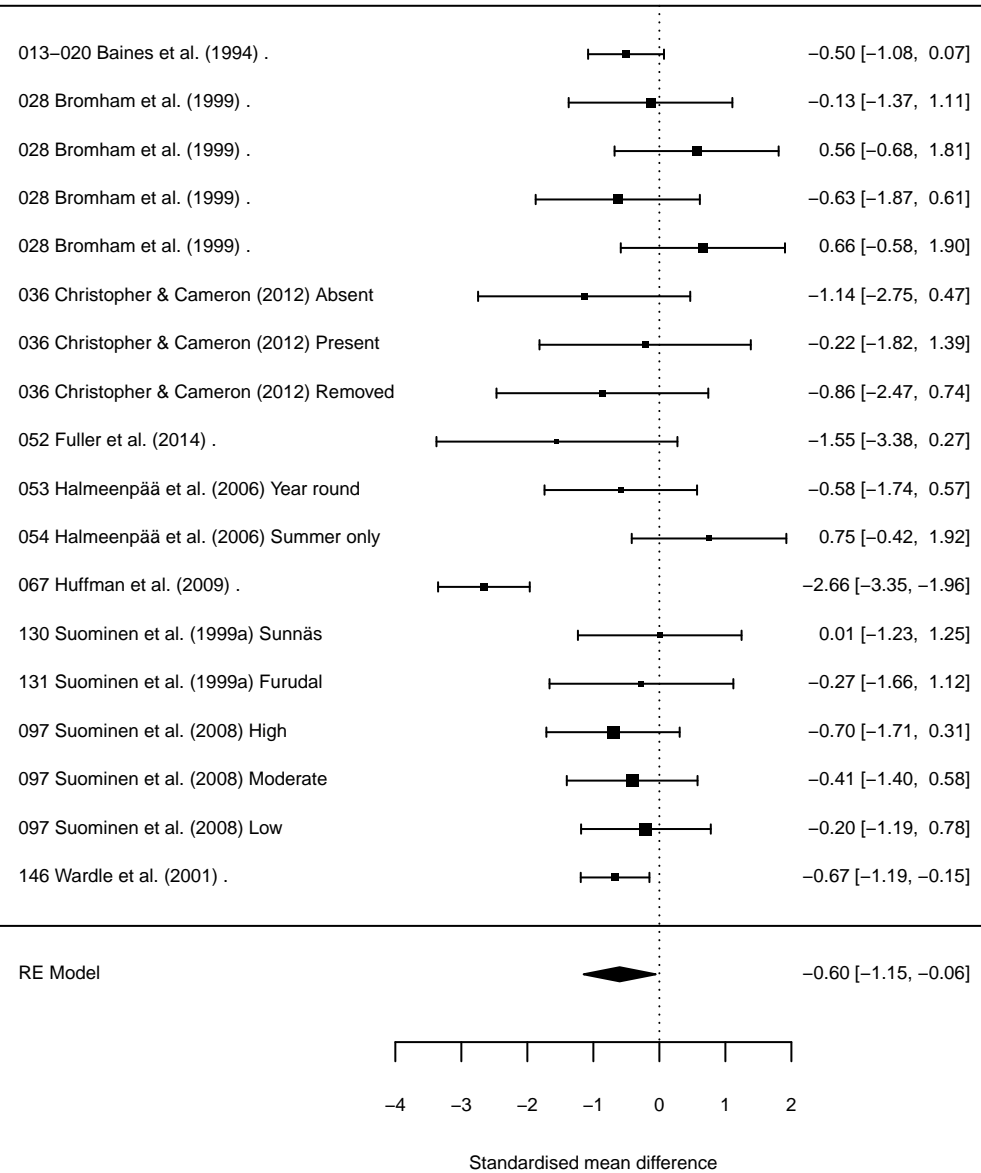
## Lepidopteran abundance



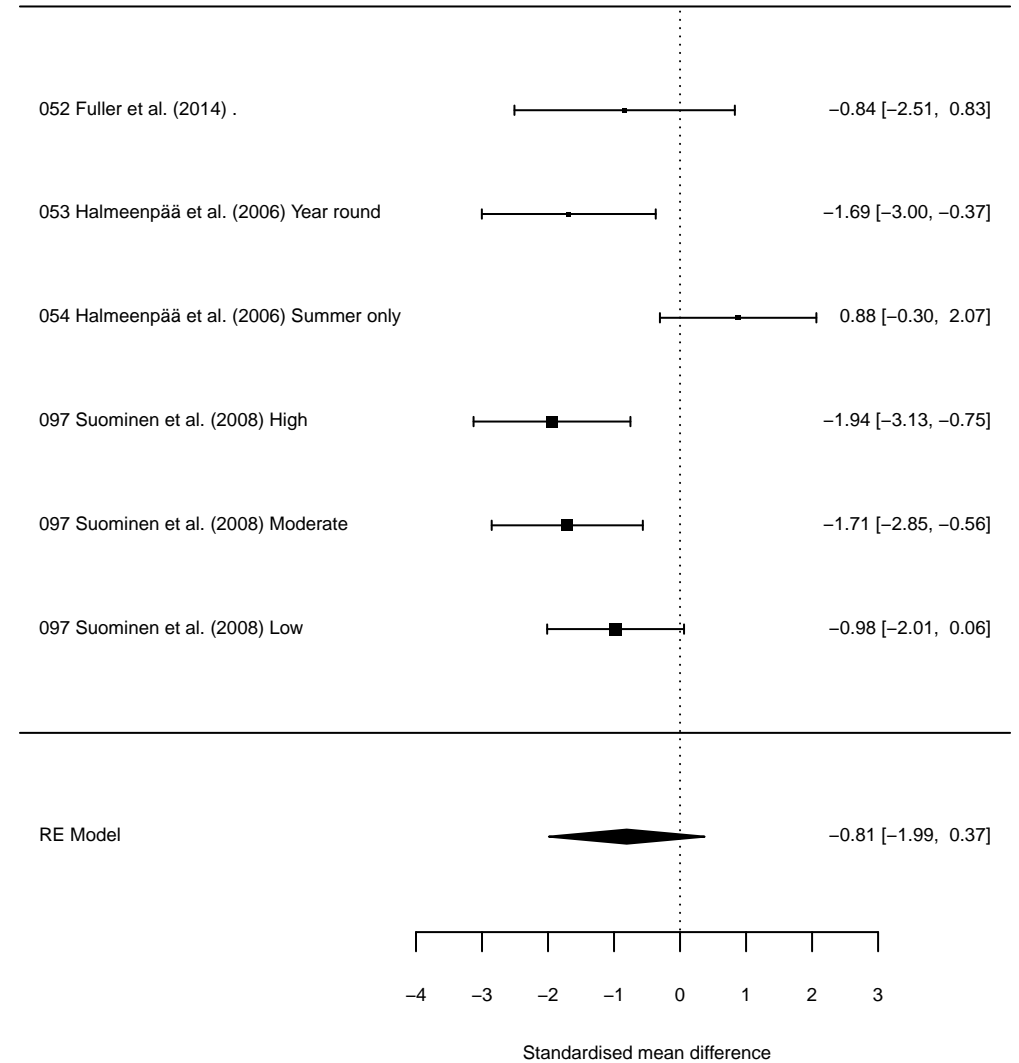
## Lepidopteran species richness



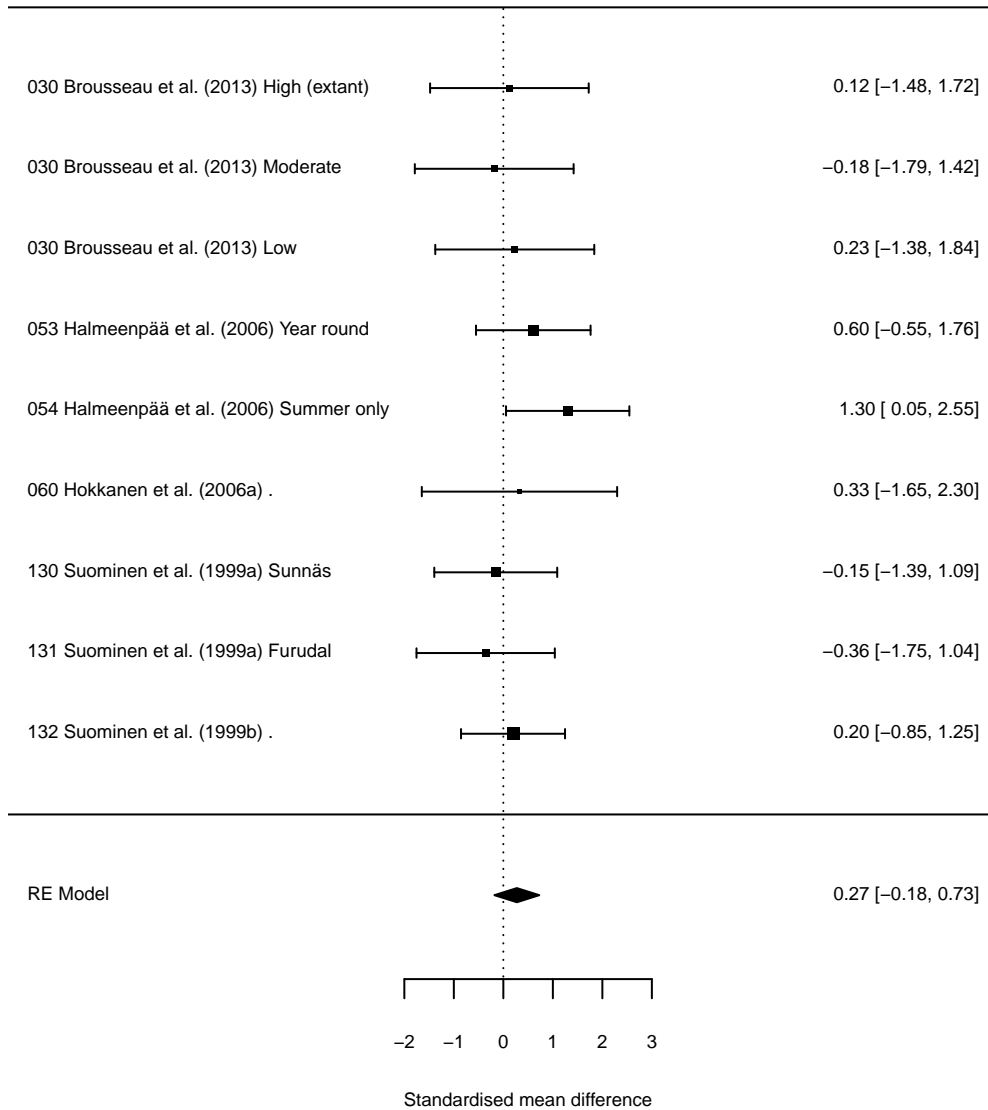
### Spider abundance



### Spider species richness



## Carabid abundance



## Carabid species richness

