[02/04/2022 12:07] Andy Purvis

Hi Sara - The code is throwing up a few studies where the PREDICTS land use classification is not consistent with what the crop names suggest (i.e., there are crops where there 'shouldn't' be). I'd been ignoring these, and simply going with the PREDICTS classification - basically ignoring the crop information . But I just looked into the inconsistency that affects the largest number of sites (31, from two studies, where LUH1 says Pasture and the crop-curation code says Forage), and actually the PREDICTS classification for these sites was wrong in both studies - the fields are used to grow fodder, rather than being grazed. So I've fixed these in the code but could you

(a) look at the other inconsistencies below and, if they need it, re-curate the Excel files such that the sites are recorded as Cropland or Plantation Forest rather than whatever they are at the moment; and

(b) do the same for the two studies I've fixed in code (on the grounds that then they'll be right for future users - but this is obviously much less urgent)? Thanks! The next message here will be the list of sites for each inconsistency; and the following one will be the sites where the Excel file needs changing to Cropland from Pasture. Let me know if anything's not clear.

like 1

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> qq<-which(merged$LUH1=="Pasture" & merged$Mag1 == "Forage")  
 > merged$SSBS[qq]  
 [1] "AD1\_2012\_\_Lentini 1 9 34" "AD1\_2012\_\_Lentini 1 9 35" "AD1\_2012\_\_Lentini 1 9 36" "AD1\_2012\_\_Lentini 1 10 38" "AD1\_2012\_\_Lentini 1 10 39" "AD1\_2012\_\_Lentini 1 10 40" "AD1\_2012\_\_Lentini 1 11 42"  
 [8] "AD1\_2012\_\_Lentini 1 11 43" "AD1\_2012\_\_Lentini 1 11 44" "AD1\_2012\_\_Lentini 1 12 46" "AD1\_2012\_\_Lentini 1 12 47" "AD1\_2012\_\_Lentini 1 12 48" "AD1\_2012\_\_Lentini 1 13 50" "AD1\_2012\_\_Lentini 1 13 51"  
 [15] "AD1\_2012\_\_Lentini 1 13 52" "MG1\_2006\_\_Baur 1 A 1" "MG1\_2006\_\_Baur 1 B 2" "MG1\_2006\_\_Baur 1 C 3" "MG1\_2006\_\_Baur 1 D 4" "MG1\_2006\_\_Baur 2 A 1" "MG1\_2006\_\_Baur 2 B 2"  
 [22] "MG1\_2006\_\_Baur 2 C 3" "MG1\_2006\_\_Baur 2 D 4" "MG1\_2006\_\_Baur 3 A 1" "MG1\_2006\_\_Baur 3 B 2" "MG1\_2006\_\_Baur 3 C 3" "MG1\_2006\_\_Baur 3 D 4" "MG1\_2006\_\_Baur 4 A 1"  
 [29] "MG1\_2006\_\_Baur 4 B 2" "MG1\_2006\_\_Baur 4 C 3" "MG1\_2006\_\_Baur 4 D 4"  
 > are.forage <- grep("AD1\_2012\_\_Lentini|MG1\_2006\_\_Baur", merged$SSBS[qq]) # By inspection of the original sources  
 > merged$Mag1[merged$SSBS %in% are.forage] <- "Forage"  
 > merged$LUH1[merged$SSBS %in% are.forage] <- "Cropland"  
 > print(paste(length(qq), "sites converted from Pasture to Forage/Cropland, based on information in the papers."))  
 [1] "31 sites converted from Pasture to Forage/Cropland, based on information in the papers."  
 >  
 > print("Primary or Bioenergy?")  
 [1] "Primary or Bioenergy?"  
 > qq <- which(merged$LUH1=="Primary" & merged$Mag1=="Bioenergy")  
 > merged$SSBS[qq]  
 [1] "JB3\_2019\_\_daSilva 2 19" "JB3\_2019\_\_daSilva 2 20" "JB3\_2019\_\_daSilva 2 21" "JB3\_2019\_\_daSilva 2 22" "JB3\_2019\_\_daSilva 2 23" "JB3\_2019\_\_daSilva 2 24" "JB3\_2019\_\_daSilva 2 25"  
 [8] "JB3\_2019\_\_daSilva 2 26" "JB3\_2019\_\_daSilva 2 27"  
 >  
 > print("Primary or OilCrops?")  
 [1] "Primary or OilCrops?"  
 > qq <- which(merged$LUH1=="Primary" & merged$Mag1=="OilCrops")  
 > merged$SSBS[qq]  
 [1] "SS1\_2011\_\_Lange 1 MÃ¼lverstedt 44"  
 >  
 > print("YSV or Cereals?")  
 [1] "YSV or Cereals?"  
 > qq <- which(merged$LUH1=="Young secondary vegetation" & merged$Mag1=="Cereals")  
 > merged$SSBS[qq]  
 [1] "AD1\_2010\_\_Goulson 1 1" "AD1\_2010\_\_Goulson 1 11" "AD1\_2010\_\_Goulson 1 14" "AD1\_2010\_\_Goulson 1 4"  
 [5] "AD1\_2010\_\_Goulson 1 6" "AD1\_2011\_\_Hanley 1 Keyneden 1" "AD1\_2011\_\_Hanley 1 Scobbiscombe/Oekenbury 11" "AD1\_2011\_\_Hanley 1 Moorhill 13"  
 [9] "AD1\_2011\_\_Hanley 1 Pinkhill 15" "AD1\_2011\_\_Hanley 1 Sherford 17" "AD1\_2011\_\_Hanley 1 Kingston 19" "AD1\_2011\_\_Hanley 1 Holwood/A38 21"  
 [13] "AD1\_2011\_\_Hanley 1 Holwood/Howtown 23" "AD1\_2011\_\_Hanley 1 Quitheock.Wisewandra 25" "AD1\_2011\_\_Hanley 1 Sherford 27" "AD1\_2011\_\_Hanley 1 Aveton 29"  
 [17] "AD1\_2011\_\_Hanley 1 Malston 3" "AD1\_2011\_\_Hanley 1 Yealmpton 31" "AD1\_2011\_\_Hanley 1 Trematon/Blunts 33" "AD1\_2011\_\_Hanley 1 Moorhill 5"  
 [21] "AD1\_2011\_\_Hanley 1 Pinkhill 7" "AD1\_2011\_\_Hanley 1 Sherford 9" "AD1\_2011b\_Hanley 1 1" "AD1\_2011b\_Hanley 1 2"  
 [25] "AD1\_2011b\_Hanley 1 5"  
 >  
 > print("YSV or OtherAnnual?")  
 [1] "YSV or OtherAnnual?"  
 > qq <- which(merged$LUH1=="Young secondary vegetation" & merged$Mag1=="OtherAnnual")  
 > merged$SSBS[qq]  
 [1] "AD1\_2010\_\_Goulson 1 12" "AD1\_2010\_\_Goulson 1 13" "AD1\_2010\_\_Goulson 1 9" "AD1\_2011\_\_Hanley 1 Sherford 10"  
 [5] "AD1\_2011\_\_Hanley 1 Scobbiscombe/Oekenbury 12" "AD1\_2011\_\_Hanley 1 Moorhill 14" "AD1\_2011\_\_Hanley 1 Pinkhill 16" "AD1\_2011\_\_Hanley 1 Sherford 18"  
 [9] "AD1\_2011\_\_Hanley 1 Keyneden 2" "AD1\_2011\_\_Hanley 1 Kingston 20" "AD1\_2011\_\_Hanley 1 Holwood/A38 22" "AD1\_2011\_\_Hanley 1 Holwood/Howtown 24"  
 [13] "AD1\_2011\_\_Hanley 1 Quitheock.Wisewandra 26" "AD1\_2011\_\_Hanley 1 Sherford 28" "AD1\_2011\_\_Hanley 1 Aveton 30" "AD1\_2011\_\_Hanley 1 Yealmpton 32"  
 [17] "AD1\_2011\_\_Hanley 1 Trematon/Blunts 34" "AD1\_2011\_\_Hanley 1 Malston 4" "AD1\_2011\_\_Hanley 1 Moorhill 6" "AD1\_2011\_\_Hanley 1 Pinkhill 8"  
 >  
 > print("YSV or OtherPerennial?")  
 [1] "YSV or OtherPerennial?"  
 > qq <- which(merged$LUH1=="Young secondary vegetation" & merged$Mag1=="OtherPerennial")  
 > merged$SSBS[qq]  
 [1] "AD1\_2011b\_Hanley 1 8"  
 >  
 > print("ISV or OtherPerennial?")  
 [1] "ISV or OtherPerennial?"  
 > qq <- which(merged$LUH1=="Intermediate secondary vegetation" & merged$Mag1=="OtherPerennial")  
 > merged$SSBS[qq]  
 [1] "CM2\_2017\_\_Rolim 1 2"  
 >  
 > print("Pasture or Cereals?")  
 [1] "Pasture or Cereals?"  
 > qq <- which(merged$LUH1=="Pasture" & merged$Mag1=="Cereals")  
 > merged$SSBS[qq]  
 [1] "VB1\_2005\_\_Eggleton 1 5" "VB1\_2005\_\_Eggleton 2 5" "VB1\_2005\_\_Eggleton 3 5" "VB1\_2005\_\_Eggleton 4 29" "VB1\_2005\_\_Eggleton 5 5"  
 >  
 > print("Pasture or OtherAnnual?")  
 [1] "Pasture or OtherAnnual?"  
 > qq <- which(merged$LUH1=="Pasture" & merged$Mag1=="OtherAnnual")  
 > merged$SSBS[qq]  
 [1] "SS1\_2011\_\_Mulder 1 B724 412" "SS1\_2011\_\_Mulder 2 B724 412" "SS1\_2011\_\_Mulder 3 B724 412" "SS1\_2011\_\_Mulder 4 B724 412"  
 >  
 > print("Pasture or Timber?")  
 [1] "Pasture or Timber?"  
 > qq <- which(merged$LUH1=="Pasture" & merged$Mag1=="Timber")  
 > merged$SSBS[qq]  
 [1] "AD2\_2018\_\_GimenezGomez 1 21" "AD2\_2018\_\_GimenezGomez 1 22" "AD2\_2018\_\_GimenezGomez 1 23" "AD2\_2018\_\_GimenezGomez 1 24" "AD2\_2018\_\_GimenezGomez 1 25"

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> qq<-which(merged$LUH1=="Pasture" & merged$Mag1 == "Forage")  
 > merged$SSBS[qq]  
 [1] "AD1\_2012\_\_Lentini 1 9 34" "AD1\_2012\_\_Lentini 1 9 35" "AD1\_2012\_\_Lentini 1 9 36" "AD1\_2012\_\_Lentini 1 10 38" "AD1\_2012\_\_Lentini 1 10 39" "AD1\_2012\_\_Lentini 1 10 40" "AD1\_2012\_\_Lentini 1 11 42"  
 [8] "AD1\_2012\_\_Lentini 1 11 43" "AD1\_2012\_\_Lentini 1 11 44" "AD1\_2012\_\_Lentini 1 12 46" "AD1\_2012\_\_Lentini 1 12 47" "AD1\_2012\_\_Lentini 1 12 48" "AD1\_2012\_\_Lentini 1 13 50" "AD1\_2012\_\_Lentini 1 13 51"  
 [15] "AD1\_2012\_\_Lentini 1 13 52" "MG1\_2006\_\_Baur 1 A 1" "MG1\_2006\_\_Baur 1 B 2" "MG1\_2006\_\_Baur 1 C 3" "MG1\_2006\_\_Baur 1 D 4" "MG1\_2006\_\_Baur 2 A 1" "MG1\_2006\_\_Baur 2 B 2"  
 [22] "MG1\_2006\_\_Baur 2 C 3" "MG1\_2006\_\_Baur 2 D 4" "MG1\_2006\_\_Baur 3 A 1" "MG1\_2006\_\_Baur 3 B 2" "MG1\_2006\_\_Baur 3 C 3" "MG1\_2006\_\_Baur 3 D 4" "MG1\_2006\_\_Baur 4 A 1"  
 [29] "MG1\_2006\_\_Baur 4 B 2" "MG1\_2006\_\_Baur 4 C 3" "MG1\_2006\_\_Baur 4 D 4"