



https://projects.nceas.ucsb.edu/nceas/projects/bien/wiki/VegBIEN\_schema

**Legend**

- location
- event
- plant
- occurrence
- specimen
- analytical
- determination
- misc
- party
- method
- reference
- community

**coordinates**

- coordinates\_id
- source\_id
- latitude\_deg
- longitude\_deg
- verbatimlatitude
- verbatimlongitude
- verbatimcoordinates
- footprintgeometry\_dwc
- coordsaccuracy\_m

**place**

- place\_id
- source\_id
- canon\_place\_id
- matched\_place\_id
- coordinates\_id
- placename\_id
- continent
- country
- stateprovince
- county
- description
- geovalid
- distance\_to\_country\_m
- distance\_to\_state\_m
- distance\_to\_county\_m

**placename**

- placename\_id
- parent\_id
- rank
- placename

**location**

- location\_id
- source\_id
- sourceaccessioncode
- plot\_location\_id
- parent\_id
- authorlocationcode
- place\_id
- accesslevel
- accessconditions
- sublocationxposition\_m
- sublocationyposition\_m
- iscultivated
- authorzone
- authordatum
- authorlocation
- locationnarrative
- azimuth
- shape
- area\_m2
- standsize
- placementmethod
- permanence
- layoutnarrative
- elevation\_m
- elevationaccuracy\_m
- elevationrange\_m
- verbatimelevation
- slopeaspect\_deg
- minslopeaspect\_deg
- maxslopeaspect\_deg
- slopegradient\_fraction
- minslopegradient\_fract...
- 13 more...

**locationplace**

- locationplace\_id
- location\_id
- place\_id
- identifier\_id

**projectcontributor**

- projectcontributor\_id
- project\_id
- party\_id
- role

**project**

- project\_id
- source\_id
- sourceaccessioncode
- projectname
- projectdescription
- startdate
- stopdate

**locationevent**

- locationevent\_id
- source\_id
- sourceaccessioncode
- accesslevel
- place\_visit\_id
- parent\_id
- plot\_id
- location\_id
- project\_id
- stratum\_id
- authoreventcode
- previous\_id
- obsstartdate
- obsenddate
- dateaccuracy
- method\_id
- temperature\_c
- 62 more...

**soilsample**

- soilsample\_id
- locationevent\_id
- horizon
- description
- depthtop\_m
- depthbottom\_m
- color
- texture
- organic\_fraction
- sand\_fraction
- silt\_fraction
- clay\_fraction
- coarse\_fraction
- ph
- acidity\_fraction
- basesaturation\_fraction
- cationexchangecapacity\_cm...
- conductivity
- 7 more...

**stratum**

- stratum\_id
- source\_id
- stratumname
- stratumheight
- stratumbase
- stratumcover
- area
- method\_id

**taxonoccurrence**

- taxonoccurrence\_id
- source\_id
- sourceaccessioncode
- locationevent\_id
- authortaxoncode
- collector\_id
- growthform
- iscultivated
- cultivatedbasis
- isnative

**taxondetermination**

- taxondetermination\_id
- taxonoccurrence\_id
- source\_id
- taxonverbatim\_id
- party\_id
- role
- determinationtype
- reference\_id
- isoriginal
- iscurrent\_verbatim
- iscurrent
- taxonfit
- taxonconfidence
- groupype
- notes
- revisions
- determinationdate

**aggregateoccurrence**

- aggregateoccurrence\_id
- source\_id
- sourceaccessioncode
- taxonoccurrence\_id
- collectiondate
- cover\_fraction
- linecover\_m
- basalarea\_m2
- biomass\_kg\_m2
- inferencearea\_m2
- count
- stratum\_id
- coverindex\_id
- occurrencestatus\_dwc
- method\_id
- notes

**trait**

- trait\_id
- taxonoccurrence\_id
- name
- value
- units

**taxonconcept**

- taxonconcept\_id
- taxonlabel\_id
- concept\_reference\_id

**taxonlabel\_relationship**

- descendant\_id
- ancestor\_id
- relationship

**taxonverbatim**

- taxonverbatim\_id
- source\_id
- taxonlabel\_id
- verbatimrank
- taxonomicname
- author
- family
- genus
- specific\_epithet
- subspecies
- morphospecies
- morphoname
- growthform
- description

**methodtaxonclass**

- methodtaxonclass\_id
- method\_id
- taxonlabel\_id
- taxonstatus
- taxonclass

**taxonlabel**

- taxonlabel\_id
- source\_id
- sourceaccessioncode
- taxonstatus
- canon\_label\_id
- matched\_label\_id
- parent\_id
- taxonepithet
- rank
- taxonomicname

**taxonstatus**

- taxonstatus\_id
- taxonlabel\_id
- party\_id
- taxonlabelstatus
- source\_id
- plantpartycomments
- startdate
- stopdate

**taxoncorrelation**

- taxoncorrelation\_id
- taxonstatus\_id
- taxonlabel\_id
- plantconvergence
- correlationstart
- correlationstop

**commclass**

- commclass\_id
- locationevent\_id
- inspection
- tableanalysis
- multivariateanalysis
- classpublication\_id
- classnotes
- 7 more...

**commdetermination**

- commdetermination\_id
- commclass\_id
- commconcept\_id
- commcode
- commname
- classfit
- classconfidence
- commauthority\_id
- notes
- type
- nomenclaturaltype

**commcorrelation**

- commcorrelation\_id
- commstatus\_id
- commconcept\_id
- commconvergence
- correlationstart
- correlationstop

**source**

- source\_id
- matched\_source\_id
- parent\_id
- shortname
- citation
- sourcetype
- accesslevel
- accessconditions
- observationtype
- title
- titlesuperior
- volume
- issue
- pagerange
- totalpages
- publisher
- publicationplace
- isbn
- edition
- numberofvolumes
- chapternumber
- reportnumber
- communicationtype
- degree
- url
- doi
- additionalinfo
- pubdate
- 7 more...

**sourcecontributor**

- sourcecontributor\_id
- source\_id
- sourceparty\_id
- role
- order

**plant**

- plant\_id

**plantobservation**

- plantobservation\_id
- source\_id
- sourceaccessioncode
- aggregateoccurrence\_id
- overallheight\_m
- overallheightaccuracy\_m
- authorplantcode
- stemcount
- reproductivecondition
- plant\_id

**specimenreplicate**

- specimenreplicate\_id
- source\_id
- sourceaccessioncode
- plantobservation\_id
- duplicate\_institutions\_sourcelist\_id
- collectioncode\_dwc
- catalognumber\_dwc
- collectionnumber
- description
- specimen\_id

**taxonlabel**

- taxonlabel\_id
- source\_id
- sourceaccessioncode
- taxonstatus
- canon\_label\_id
- matched\_label\_id
- parent\_id
- taxonepithet
- rank
- taxonomicname

**taxonlineage**

- taxonlineage\_id
- taxonstatus\_id
- childtaxonstatus\_id
- parenttaxonstatus\_id

**taxonstatus**

- taxonstatus\_id
- taxonlabel\_id
- party\_id
- taxonlabelstatus
- source\_id
- plantpartycomments
- startdate
- stopdate

**taxonstatus**

- taxonstatus\_id
- taxonlabel\_id
- party\_id
- taxonlabelstatus
- source\_id
- plantpartycomments
- startdate
- stopdate

**commstatus**

- commstatus\_id
- commconcept\_id
- source\_id
- commconceptstatus
- commparent\_id
- commlevel
- commpartycomments
- party\_id
- startdate
- stopdate

**commlineage**

- commlineage\_id
- parentcommstatus\_id
- childcommstatus\_id

**revision**

- revision\_id
- tablename
- tableattribute
- tablerecord
- previousvaluetext
- previousvaluetype
- previousrevision\_id
- revisiondate

**stemobservation**

- stemobservation\_id
- source\_id
- sourceaccessioncode
- plantobservation\_id
- authorstemcode
- tag
- tags
- xposition\_m
- yposition\_m
- diameterbreastheight\_m
- basaldiameter\_m
- diameteraccuracy\_m
- height\_m
- heightfirstbranch\_m
- heightaccuracy\_m
- health
- age

**specimen**

- specimen\_id

**method**

- method\_id
- source\_id
- name
- description
- diameterheight\_m
- mindiameter\_m
- maxdiameter\_m
- minheight\_m
- maxheight\_m
- observationtype
- observationmeasure
- covermethod\_id
- samplingfactor
- coverbasis
- stemsamplingmethod
- shape
- length\_m
- width\_m
- radius\_m
- area\_m2
- samplearea\_m2
- subplotspacing\_m
- subplotmethod\_id
- pointspertline

**covermethod**

- covermethod\_id
- source\_id
- covertype
- coverestimationmethod

**coverindex**

- coverindex\_id
- covermethod\_id
- covercode
- upperlimit
- lowerlimit
- coverpercent
- indexdescription

**userdefined**

- userdefined\_id
- userdefinedname
- userdefinedmetadata
- userdefinedcategory
- userdefinedtype
- tablename

**commname**

- commname\_id
- commname
- source\_id
- dateentered

**commusage**

- commusage\_id
- commname\_id
- commname
- commconcept\_id
- commnamestatus
- classsystem
- party\_id
- commstatus\_id
- usagesstart
- usagesstop

^ Core  
v Other

**analytical\_stem**

- datasource
- country
- stateProvince
- county
- locality
- decimalLatitude
- decimalLongitude
- coordinateUncertaintyInMeters
- coordinateSource\_bien
- georeferenceProtocol\_bien
- geovalid\_bien
- isNewWorld\_bien
- projectID
- project\_contributors
- locationID
- locationName
- subplot
- location\_cultivated\_bien
- locationevent\_pkey
- eventDate
- elevationInMeters
- slopeAspect
- slopeGradient
- plotArea\_ha
- samplingProtocol
- temperature\_C
- precipitation\_m
- stratum\_name
- communities
- plot\_collectors
- specimenHolderInstitutions
- collection
- accessionNumber
- occurrenceID
- recordedBy
- recordNumber
- dateCollected
- family\_verbatim
- scientificName\_verbatim
- identifiedBy
- dateIdentified
- identificationRemarks
- family\_matched
- taxonName\_matched
- scientificNameAuthorship\_matched
- higherPlantGroup\_bien
- taxonomic\_status
- scrubbed\_family
- scrubbed\_genus
- scrubbed\_morphospecies\_binomial

**tnrs**

- batch
- Name\_number
- Name\_submitted
- Overall\_score
- Name\_matched
- Name\_matched\_rank
- Name\_score
- Name\_matched\_author
- Name\_matched\_url
- Author\_matched
- Author\_score
- Family\_matched
- Family\_score
- Name\_matched\_accepted\_family
- Genus\_matched
- Genus\_score
- Specific\_epithet\_matched
- Specific\_epithet\_score
- Infraspecific\_rank
- Infraspecific\_epithet\_matched
- Infraspecific\_epithet\_score
- Infraspecific\_rank\_2
- Infraspecific\_epithet\_2\_matched
- Infraspecific\_epithet\_2\_score
- 14 more...

**taxon\_trait**

- scientificName
- measurementType
- measurementValue
- measurementUnit

**address**

- address\_id
- party\_id
- organization\_id
- orgposition
- email
- street
- street2
- city
- stateprovince
- postalcode
- country
- currentflag
- addressstartdate

**locationeventcontributor**

- locationeventcontributor\_id
- locationevent\_id
- party\_id
- role
- contributiondate

**geoscrub\_output**

- \*row\_num
- decimalLatitude
- decimalLongitude
- country
- stateProvince
- county
- acceptedCountry
- acceptedStateProvince
- acceptedCounty
- latLongDomainValid\_verbatim
- latLongInCountry\_verbatim
- latLongInStateProvince\_verbatim
- latLongInCounty\_verbatim
- latLongDomainValid
- latLongInCountry
- latLongInStateProvince
- latLongInCounty
- geovalid

**telephone**

- telephone\_id
- party\_id
- phonenumber
- phonetype

**party**

- party\_id
- source\_id
- sourceaccessioncode
- fullname
- salutation
- givenname
- middlename
- surname
- suffix
- city
- department
- organizationname
- currentname\_id
- contactinstructions
- email
- partytype
- partypublic

**provider\_count**

- dataprovder
- dataset
- records
- sourcetype
- observationtype

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- source\_id
- sourceparty\_id
- role
- order

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- organizationname
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- partytype
- partypublic

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- accessconditions
- observationtype
- title
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- volume
- issue
- pagerange
- totalpages
- publisher
- publicationplace
- isbn
- edition
- numberofvolumes
- chapternumber
- reportnumber
- communicationtype
- degree
- url
- doi
- additionalinfo
- pubdate
- 7 more...

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- isbn
- edition
- numberofvolumes
- chapternumber
- reportnumber
- communicationtype
- degree
- url
- doi
- additionalinfo
- pubdate
- 7 more...

**definedvalue**

- definedvalue\_id
- userdefined\_id
- tablerecord\_id
- definedvalue

**commconcept**

- commconcept\_id
- commname\_id
- reference\_id
- commdescription
- commname

**commstatus**

- commstatus\_id
- commconcept\_id
- source\_id
- commconceptstatus
- commparent\_id
- commlevel
- commpartycomments
- party\_id
- startdate
- stopdate

**commlineage**

- commlineage\_id
- parentcommstatus\_id
- childcommstatus\_id

**userdefined**

- userdefined\_id
- userdefinedname
- userdefinedmetadata
- userdefinedcategory
- userdefinedtype
- tablename

**commname**

- commname\_id
- commname
- source\_id
- dateentered

**commusage**

- commusage\_id
- commname\_id
- commname
- commconcept\_id
- commnamestatus
- classsystem
- party\_id
- commstatus\_id
- usagesstart
- usagesstop

**revision**

- revision\_id
- tablename
- tableattribute
- tablerecord
- previousvaluetext
- previousvaluetype
- previousrevision\_id
- revisiondate