## Testing generateZerosUsingSL

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```
dat <- MadeUpData_for_SL_SA_tests_v1_WGRDBES_EST_TEST_3</pre>
ss <- dat[["SS"]]
##
        SSid LEid FOid TEid FTid SLid OSid SSrecType SSseqNum SSstratification
              NA 74157 NA
                               NA 47939
                                          NA
                                               SS
      SSstratumName SSclustering SSclusterName SSobsActTyp SScatchFra SSobsTyp
## 1:
                               N
                                             U
                                                       Sort
##
      SSsampler
                               SSspecListName SSuseCalcZero SStimeTotal SStimeSamp
## 1: Observer MadeUpData_for_SL_SA_tests_v1
      SSnumTotal SSnumSamp SSselProb SSincProb SSselectMeth SSunitName
##
## 1:
                         1
                                   1
                                             1
                                                      CENSUS
##
      SSselectMethCluster SSnumTotalClusters SSnumSampClusters SSselProbCluster
                     <NA>
                                          NA
      SSincProbCluster SSsamp SSnoSampReason SSnonRespCol SSauxVarTot
## 1:
                    NA
                            Y
                                         <NA>
      SSauxVarValue SSauxVarName SSauxVarUnit
##
## 1:
                 NA
                            <NA>
                                         <NA>
sl <- dat[["SL"]]</pre>
sl <- subset(sl, SLspeclistName %in% ss$SSspecListName)</pre>
##
       SLid SLrecType SLcou SLinst
                                                   SLspeclistName SLyear
                              4484 MadeUpData_for_SL_SA_tests_v1
## 1: 47939
                   SL
                         ZW
## 2: 47940
                   SL
                         ZW
                              4484 MadeUpData_for_SL_SA_tests_v1
                                                                    1965
      SLcatchFrac SLcommTaxon SLsppCode
## 1:
                       126436
              Lan
                                 126436
                       107254
              Lan
                                 107254
sa <- dat["SA"]
sa
## $SA
               SSid LEid SArecType SAseqNum SAparSequNum SAstratification
## 1: 575694 229579
                                SA
                      NA
                                          1
      SAstratumName SAspeCode SAspeCodeFAO SAstateOfProc SApres
## 1:
                       107254
                                       NEP
                                                     FRE
                 SAspecState SAcatchCat SAlandCat SAcommCatScl SAcommCat SAsex
## 1: DeadOrZeroProbSurvival
                                             <NA>
                                                           <NA>
                                    Lan
      SAeconZoneIndi SAarea SAstatRect SAfishManUnit SAgsaSubarea SAjurisdArea
                                                 <NA> NotApplicable
                <NA>
                       <NA>
                                  <NA>
      SAnatFishAct SAmetier5 SAmetier6 SAgear SAmeshSize SAselDev SAselDevMeshSize
                                         <NA>
## 1:
              <NA>
                        <NA>
                                  <NA>
                                                       NA
                                                                NA
```

```
SAunitType SAtotalWtLive SAsampWtLive SAnumTotal SAnumSamp SAselProb
                          NA
## 1:
                                       NA
                                                  1 1
            Box
     SAincProb SAselectMeth SAunitName SAlowHierarchy SAsampler SAsamp
##
                     CENSUS
                                           D Observer
## 1:
                               1
     SAnoSampReason SAnonRespCol SAnoSampReasonFM SAnoSampReasonBV SAtotalWtMes
##
## 1:
              <NA>
                              N
                                            <NA>
     SAsampWtMes SAconFacMeasLive SAauxVarTot SAauxVarValue SAauxVarName
## 1:
                                1
                                          NA
##
     SAauxVarUnit
## 1:
             <NA>
dat_after <- generateZerosUsingSL(dat)</pre>
ss_after <- dat_after[["SS"]]
ss_after
       SSid LEid FOid TEid FTid SLid OSid SSrecType SSseqNum SSstratification
##
## 1: 229579 NA 74157 NA
                             NA 47939 NA
                                                 SS
     SSstratumName SSclustering SSclusterName SSobsActTyp SScatchFra SSobsTyp
## 1:
                              N
                                           U
                                                    Sort
                                                               Lan
                                                                     Volume
                              SSspecListName SSuseCalcZero SStimeTotal SStimeSamp
##
     SSsampler
## 1: Observer MadeUpData_for_SL_SA_tests_v1
                                                      Y
     SSnumTotal SSnumSamp SSselProb SSincProb SSselectMeth SSunitName
##
## 1:
             1 1 1 1
                                                  CENSUS
     SSselectMethCluster SSnumTotalClusters SSnumSampClusters SSselProbCluster
## 1:
                    <NA>
                                        NA
     SSincProbCluster SSsamp SSnoSampReason SSnonRespCol SSauxVarTot
## 1:
                   NA
                                      <NA>
                                                    N
                           Υ
     SSauxVarValue SSauxVarName SSauxVarUnit
## 1:
                NΑ
                           <NA>
sl_after <- dat_after[["SL"]]</pre>
sl_after <- subset(sl_after, SLspeclistName %in% ss_after$SSspecListName)</pre>
sl after
      SLid SLrecType SLcou SLinst
                                                SLspeclistName SLyear
## 1: 47939
                  SL
                        ZW
                             4484 MadeUpData_for_SL_SA_tests_v1
## 2: 47940
                  SL
                        ZW
                             4484 MadeUpData for SL SA tests v1
     SLcatchFrac SLcommTaxon SLsppCode
## 1:
             Lan
                      126436
                                126436
## 2:
             Lan
                      107254
                                107254
sa after <- dat after["SA"]
sa_after
## $SA
##
                  SSid LEid SArecType SAseqNum SAparSequNum SAstratification
           SAid
    1: 575675.4 229579
                                        0.814
##
    2: 575675.5 229579
                         NA
                                  SA
                                        0.815
                                                        NA
                                                                         N
    3: 575675.6 229579
                         NA
                                  SA
                                        0.816
                                                        NA
##
    4: 575675.7 229579
                         NA
                                  SA
                                        0.817
                                                        NA
                                                                         N
##
    5: 575675.8 229579
                         NA
                                  SA
                                        0.818
                                                        NA
                                                                         N
## ---
## 183: 575693.6 229579
                                  SA
                                        0.996
                         NA
                                                        NA
                                                                         N
## 184: 575693.7 229579
                         NA
                                  SA
                                        0.997
                                                        NΑ
                                                                         N
## 185: 575693.8 229579
                         NA
                                  SA
                                        0.998
                                                        NA
                                                                         N
```

		575693.9 229579 NA		SA 0.9						N
##	187:	575694.0 22957		SA	1.00			JA		N
##		SAstratumName	_	_				SApre		
##	1:	Ü	107254		<na></na>		Inknown			
##	2:	U	126436		<na></na>		Inknown			
##	3:	Ŭ	107254		<na></na>		Inknown			
##	4:	Ū	127143		<na></na>		Inknown			
## ##	5: 	U	107254	•	<na></na>	U	Inknown	Unknot	wn	
##	183:	U	105693		<na></na>	U	Inknown	Unknow	wn	
##	184:	U	125815		<na></na>		Inknown			
##	185:	U	131950		<na></na>	U	Inknown	Unknow	wn	
##	186:	U	136980		<na></na>	U	Jnknown	Unknow	wn	
##	187:	U	107254		NEP		FRE	WI	HL	
##		SAs	specState S	SAcatchCa	t SAla	andCat	SAcommo	CatScl	${\tt SAcommCat}$	SAsex
##	1:		Unknown	La	n	<na></na>		<na></na>	NA	U
##	2:		Unknown	La	n	<na></na>		<na></na>	NA	U
##	3:		Unknown	La	n	<na></na>		<na></na>	NA	U
##	4:		Unknown	La	n	<na></na>		<na></na>	NA	U
##	5:		Unknown	La	n	<na></na>		<na></na>	NA	U
##				_						
	183:		Unknown	La		<na></na>		<na></na>	NA	Ŭ
	184:		Unknown	La		<na></na>		<na></na>	NA	U
	185:		Unknown	La		<na></na>		<na></na>	NA	U
	186:	D 107 D 1	Unknown	La		<na></na>		<na></na>	NA	U
##	187:	DeadOrZeroProb SAeconZoneIndi		La:		<na></na>	.i+ C1.	<na></na>	NA mui CA	U iad^mos
##	1:	SAECONZONETHOM <na></na>		NA>	SALIS		_		area SAjur ablo	<na></na>
##	2:	<na></na>		<na></na>			[A> Not <i>]</i> [A> Not <i>]</i>			<na></na>
##	3:	<na></na>		<na></na>			IA> Not			<na></na>
##	4:	<na></na>		<na></na>			A> Not			<na></na>
##	5:	<na></na>		<na></na>			IA> Not			<na></na>
##										
##	183:	<na></na>	<na></na>	<na></na>		<n< th=""><th>IA&gt; Not</th><th>Applica</th><th>able</th><th><na></na></th></n<>	IA> Not	Applica	able	<na></na>
##	184:	<na></na>	<na></na>	<na></na>			A> Not			<na></na>
##	185:	<na></na>	<na></na>	<na></na>		<n< th=""><th>A&gt; Not</th><th>Applica</th><th>able</th><th><na></na></th></n<>	A> Not	Applica	able	<na></na>
##	186:	<na></na>	<na></na>	<na></na>		<n< th=""><th>A&gt; Not</th><th>Applica</th><th>able</th><th><na></na></th></n<>	A> Not	Applica	able	<na></na>
##	187:	<na></na>	<na></na>	<na></na>		<n< th=""><th>IA&gt; Not</th><th>Applica</th><th>able</th><th><na></na></th></n<>	IA> Not	Applica	able	<na></na>
##		SAnatFishAct S	Ametier5 S	SAmetier6	SAgea	ar SAme	shSize	SAsell	Dev	
##	1:	<na></na>	<na></na>	<na></na>			NA		NA	
##	2:	<na></na>	<na></na>	<na></na>	<na< th=""><th></th><th>NA</th><th></th><th>NA</th><th></th></na<>		NA		NA	
##	3:	<na></na>	<na></na>	<na></na>	< N A		NA		NA	
##	4:	<na></na>	<na></na>	<na></na>	<na< th=""><th></th><th>NA</th><th></th><th>NA</th><th></th></na<>		NA		NA	
##	5:	<na></na>	<na></na>	<na></na>	<na< th=""><th><i>A</i>&gt;</th><th>NA</th><th></th><th>NA</th><th></th></na<>	<i>A</i> >	NA		NA	
##	100	ZNTAS	ATA >	< NT A >	< NT A		37.4		NT A	
	183:	<na></na>	<na></na>	<na></na>	< N A		NA NA		NA	
	184:	<na></na>	<na></na>	<na></na>	< N A		NA MA		NA NA	
	185: 186:	<na> <na></na></na>	<na></na>	<na></na>	< N A < N A		NA NA		NA NA	
	187:	<na></na>	<na></na>	<na></na>	< N A		NA NA		NA NA	
##	101.	SAselDevMeshSi						ive S		
##	1:	PURCINGALICUIDI	NA	Box	ourw or	0		0	1	
##	2:		NA	Box		0		0	1	
##	3:		NA	Box		0		0	1	

```
##
     4:
                         NA
                                     Box
                                                        0
                                                                       0
                                                                                    1
##
     5:
                         NΑ
                                     Box
                                                        0
                                                                       0
                                                                                    1
##
    ---
## 183:
                         NA
                                     Box
                                                        0
                                                                       0
                                                                                    1
##
   184:
                         NA
                                     Box
                                                        0
                                                                       0
                                                                                    1
##
   185:
                         NA
                                     Box
                                                        0
                                                                       0
                                                                                    1
## 186:
                         NA
                                     Box
                                                        0
                                                                       0
                                                                                    1
## 187:
                         NA
                                     Box
                                                                      NA
                                                       NA
                                                                                    1
##
         SAnumSamp SAselProb SAincProb SAselectMeth
                                                                  SAunitName SAlowHierarchy
##
                                                   CENSUS 575675.499000004
     1:
                  1
                              1
                                          1
                                                                                              D
##
     2:
                  1
                              1
                                          1
                                                   CENSUS 575675.599000004
                                                                                              D
##
                                          1
                                                   CENSUS 575675.699000004
                                                                                              D
     3:
                  1
                              1
##
     4:
                                          1
                                                   CENSUS 575675.799000004
                                                                                              D
                  1
                              1
##
     5:
                              1
                                                   CENSUS 575675.899000004
                                                                                              D
                  1
                                          1
##
   183:
##
                  1
                              1
                                          1
                                                   CENSUS
                                                                  575693.699
                                                                                              D
##
   184:
                  1
                              1
                                          1
                                                   CENSUS
                                                                  575693.799
                                                                                              D
   185:
                                                                                              D
##
                              1
                                          1
                                                   CENSUS
                                                                  575693.899
##
   186:
                  1
                              1
                                          1
                                                   CENSUS
                                                                  575693.999
                                                                                              D
                              1
                                          1
                                                                                              D
##
   187:
                  1
                                                   CENSUS
##
         SAsampler SAsamp
                             SAnoSampReason SAnonRespCol SAnoSampReasonFM
##
     1:
          Observer
                                         <NA>
                                                           N
##
          Observer
                                         <NA>
                                                           N
                                                                            <NA>
     2:
                          N
##
     3:
          Observer
                          N
                                         <NA>
                                                           N
                                                                            <NA>
                                         <NA>
##
          Observer
                          N
                                                           N
                                                                            <NA>
     4:
##
     5:
          Observer
                          N
                                         <NA>
                                                           N
                                                                            <NA>
##
##
   183:
          Observer
                          N
                                         <NA>
                                                           N
                                                                            <NA>
   184:
          Observer
                          N
                                         <NA>
                                                           N
##
                                                                            <NA>
   185:
          Observer
                                         <NA>
                                                           N
                                                                            <NA>
##
                          N
                                                           N
##
   186:
          Observer
                          N
                                         <NA>
                                                                            <NA>
##
   187:
          Observer
                          N
                                         <NA>
                                                           N
                                                                            <NA>
##
                             SAtotalWtMes SAsampWtMes SAconFacMeasLive SAauxVarTot
         SAnoSampReasonBV
##
                       <NA>
                                          0
                                                        0
     1:
                                                                            1
                                                                                        NA
                                          0
                                                        0
##
     2:
                       <NA>
                                                                            1
                                                                                        NA
                                          0
                                                        0
##
     3:
                       <NA>
                                                                            1
                                                                                        NA
                       <NA>
##
     4:
                                          0
                                                        0
                                                                            1
                                                                                        NA
##
     5:
                       <NA>
                                          0
                                                        0
                                                                            1
                                                                                        NA
##
    ___
## 183:
                       <NA>
                                          0
                                                        0
                                                                            1
                                                                                        NA
   184:
                       <NA>
                                          0
                                                        0
                                                                            1
                                                                                        NA
   185:
                                          0
                                                        0
##
                       <NA>
                                                                            1
                                                                                        NA
##
   186:
                       <NA>
                                          0
                                                        0
                                                                                        NA
                                                                            1
##
   187:
                       <NA>
                                         10
                                                                                        NA
                                                                            1
##
         SAauxVarValue SAauxVarName SAauxVarUnit
##
                      NA
                                   <NA>
     1:
                                                  <NA>
##
     2:
                      NA
                                   <NA>
                                                  <NA>
##
     3:
                      NA
                                   <NA>
                                                  <NA>
##
     4:
                      NA
                                   <NA>
                                                  <NA>
##
     5:
                      NA
                                   <NA>
                                                  <NA>
##
## 183:
                                   <NA>
                                                  <NA>
                      NA
## 184:
                      NA
                                   <NA>
                                                  <NA>
## 185:
                      NA
                                   <NA>
                                                  <NA>
```