

# African Swine Fever situation in Sardinia

## Activities and results

*PAFF Committee*  
*16 January 2019*



# ASF ACTIVITIES and RESULTS

## 2015-2018

Control measures are focused on the three target populations

**DOMESTIC PIGS**  
14 034 holdings  
178 000 heads



**WILD BOAR**  
≈90 000 heads



**ILLEGAL  
FREE-RANGING PIGS**  
nowadays ≈ 500 heads



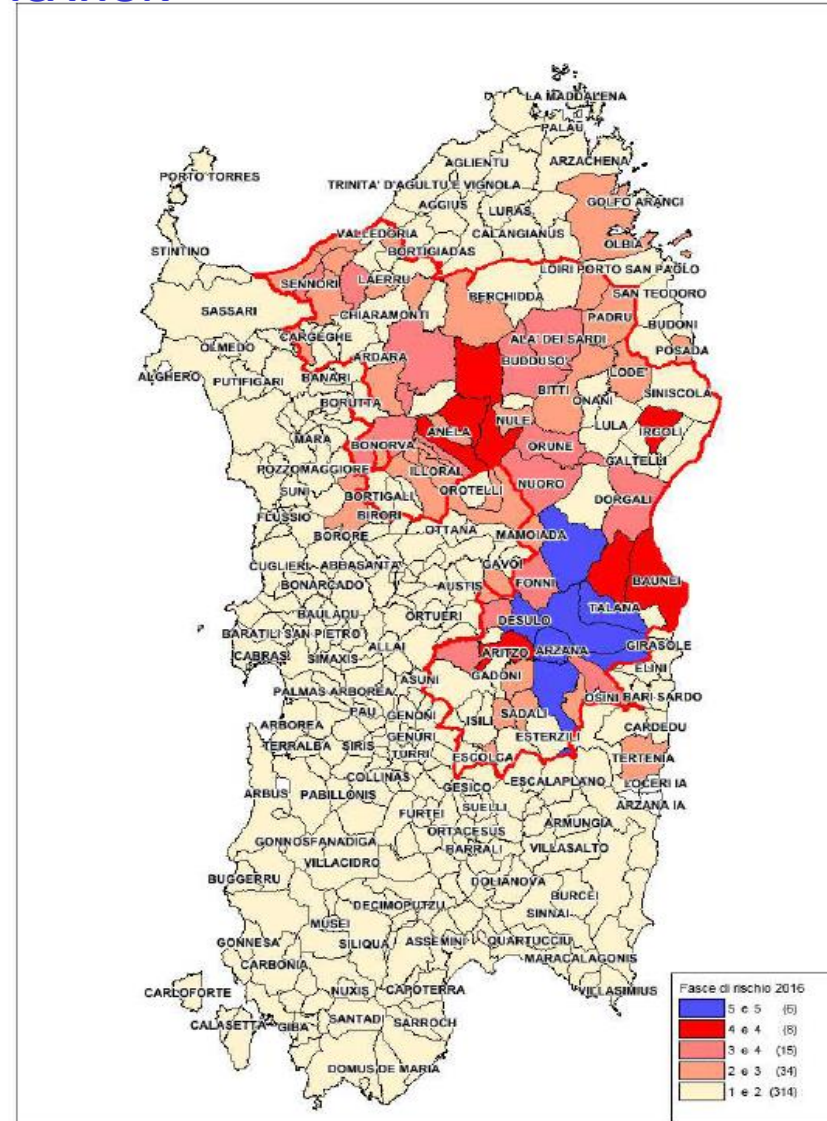
## **REORGANIZATION OF LOCAL VETERINARY SERVICES**

- ❖ **SINGLE HEALTH UNIT (ATS) AND SINGLE COORDINATOR**
- ❖ **FUNDAMENTAL OBJECTIVE OF THE ATS DIRECTOR GENERAL ESTABLISHED BY THE GOVERNMENT OF SARDINIA**
- ❖ **ROTATION OF OFFICIAL VETS**
- ❖ **12 ADDITIONAL TEAMS DEVOTED TO ASF (GRUPPO DI INTERVENTO VETERINARIO, GIV)**
- ❖ **ATS INTERNAL PLAN TO VERIFY EFFICACY OF CONTROLS**
- ❖ **REORGANIZATION OF THE SANCTIONS OFFICE**

## RISK-BASED PROGRAMME OF OFFICIAL CONTROLS FOR HOLDING CERTIFICATION

The **controls** include:

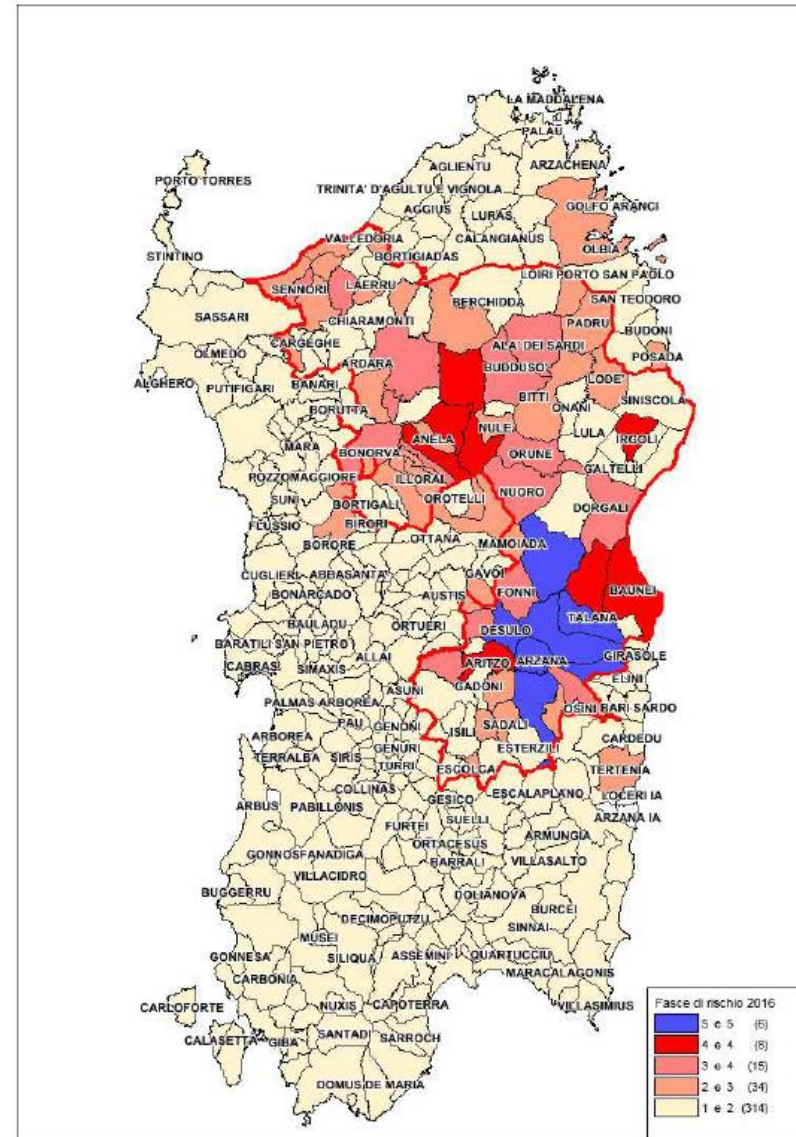
- 1) the clinical visit;
- 2) verification of compliance with the I&R obligations;
- 3) verification of compliance with the rules on animal welfare;
- 4) verification of biosecurity requirements;
- 5) verification of the expected reproductive parameters;
- 6) verification of the disposal of by-products of porcine origin;
- 7) blood sampling for ASF



## RISK-BASED PROGRAMME OF OFFICIAL CONTROLS FOR HOLDING CERTIFICATION

Following **official controls**, the Veterinary Service attribute or confirm to the pig farms one of the following two health qualifications: **controlled or certified**.

- a) **"Holding controlled for ASF"**: the overall outcome has been unfavorable but the holding results compliant with the clinical and serological parameters.
- b) **"Holding certified for ASF"**: the outcome of the check was favorable for all the parameters considered.



## OFFICIAL CONTROLS IN PIG HOLDINGS 2018

**TARGET:**

**RISK LEVEL 1 – 2: 50% HOLDINGS**

**RISK LEVEL 3: 80% HOLDINGS**

**RISK LEVEL 4 – 5: 100% HOLDINGS**

RISK LEVEL	HOLDINGS	TARGET 2018	PERFORMED O.C.	% PERFORMED O.C.
1, 2	12106	6053	6469	106,87
3	1009	801	549*	68,54*
4	555	555	412*	74,23*
5	364	364	364	100
Total	14034	7773	7794	100,27

\* DATA UPLOADING IS ONGOING

## OFFICIAL CONTROLS NON COMPLIANCES ACCORDING TO REGIONAL REQUIREMENTS 2018

ASSL	HERDS	CONTROLS NON COMPLIANCE/CONTROLS	% CONTROLS NON COMPLIANCE/CONTROLS	FOLLOW UP
SASSARI	3003	322/1427	22,56	238
OLBIA	1403	113/523	21,60	128
NUORO	2457	907/1504	60,30	142
LANUSEI	1092	342/840	40,71	174
ORISTANO	3253	466/1062	43,87	35
SANLURI	844	55/698	7,87	52
CARBONIA	567	235/365	64,38	0
CAGLIARI	3051	768/1463	52,49	257
<b>TOTAL</b>	<b>15670</b>	<b>3208/7873</b>	<b>40,74</b>	<b>1026</b>

### TOTAL NON-COMPLIANCE:

N.C. I&R (e.g. readability of tattoo on pigmented breed): 897

N.C. Reproductive parametres: 2407

N.C. Biosecurity (e.g. double fencing): 1172

N.C. Welfare: 264

## ASF TESTING IN PIG HOLDINGS 2018

ASSL	ACTIVE SURVEILLANCE SEROLOGY N. HOLDINGS	N° HEADS TESTED	PASSIVE SURVEILLANCE VIROLOGY N. HOLDINGS	ORGANS TESTED
SASSARI	2210	10646	49	61
OLBIA	931	4675	6	10
NUORO	2320	19808	24	69
LANUSEI	985	10411	36	163
ORISTANO	1577	8373	6	9
SANLURI	585	2793	1	3
CARBONIA	268	1288	0	0
CAGLIARI	1356	6890	10	8
<b>TOTAL</b>	<b>10232</b>	<b>64884</b>	<b>132</b>	<b>323</b>



## OFFICIAL CONTROLS PERFORMED 2015-2018

	REGISTRY NATIONAL DATA BASE (BDN) every 31 <sup>st</sup> DECEMBER		O.C. <i>BY PLAN</i>	OTHER CHECKS
	SWINE HOLDINGS	HEADS		
2015	15853	167821	11610	31340
2016	14745	159061	7445	39741
2017	14455	187882	8188	45209
2018	14034	178763	7794	41427* Data uploading Is ongoing

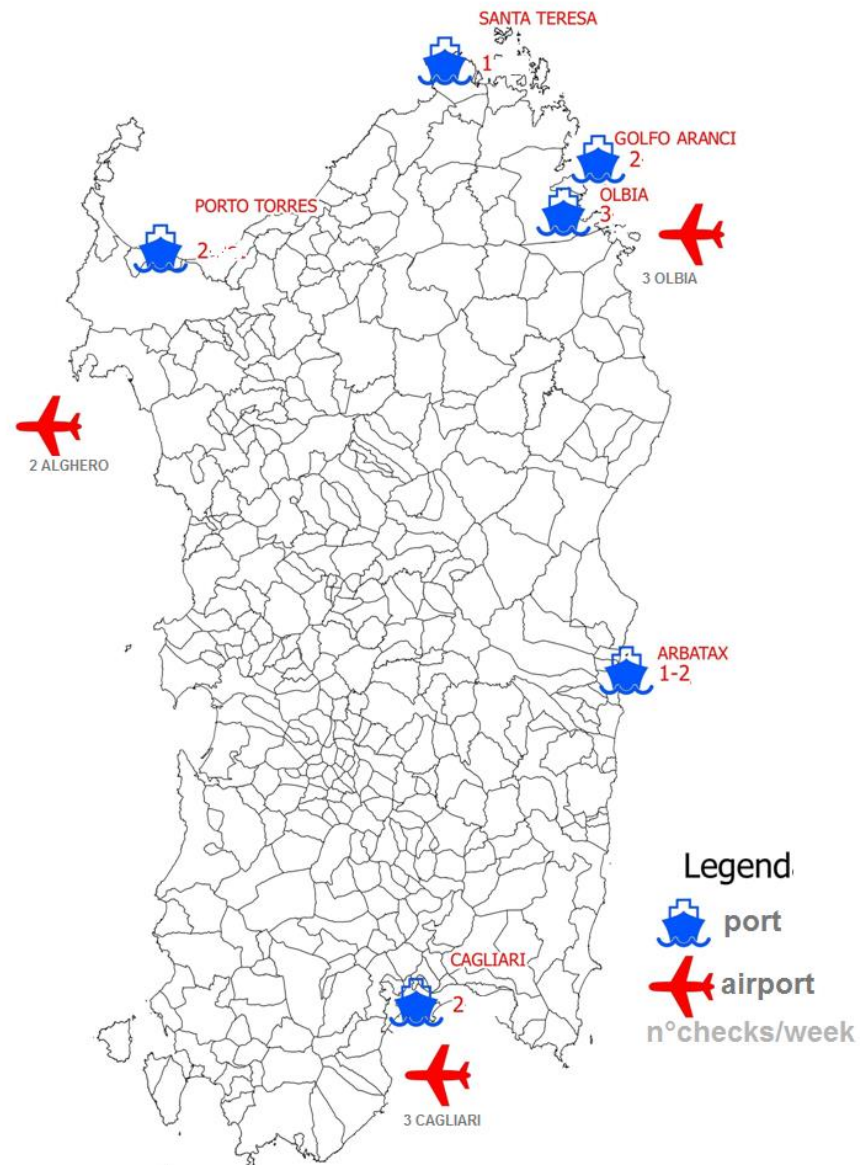
## CERTIFICATION OF PIG HOLDINGS IN 2018

ASSL	NATIONAL DATABASE (BDN) AT 31 DEC. 2018	TOTAL OF QUALIFIED HOLDING					
	SWINE HOLDINGS	CERTIFIED	% CERTIFIED	CONTROLLED	% CONTROLLED	QUALIFICATION TO BE ATTRIBUTED	% QUALIFICATIONS TO BE ATTRIBUTED
SASSARI	2726	2073	76,05	610	22,38	43	1,58
OLBIA	1332	816	61,26	464	34,83	56	4,20
NUORO	2330	698	29,96	1518	65,15	114	4,89
LANUSEI	993	575	57,91	327	32,93	91	9,16
ORISTANO	2902	2509	86,46	318	10,96	75	2,58
SANLURI	717	675	94,14	37	5,16	5	0,70
CARBONIA	531	128	24,11	388	73,07	15	2,82
CAGLIARI	2503	1192	47,62	1250	49,94	61	2,44
<b>TOTALE</b>	<b>14034</b>	<b>8666</b>	<b>61,75</b>	<b>4912</b>	<b>35,00</b>	<b>460</b>	<b>3,28</b>

## OFFICIAL CONTROLS IN PORTS AND AIRPORTS 2018

Port checks					
ASSL	SASSARI	OLBIA	CAGLIARI	LANUSEI	TOTAL
N. vehicles	1849	1802	1036	52	4739
products non conformities (nor or irregular labelling)	19	11	0	9	39

Airport checks				
ASSL	SASSARI	OLBIA	CAGLIARI	TOTAL
N. passengers	1992	1750	1511	5253
products non conformities (nor or irregular labelling)	1	0	23	24



# OFFICIAL CONTROLS IN RESTAURANTS AND AGRITOURISM

100% of the scheduled checks were performed

Assl	SASSARI	OLBIA	NUORO	ORISTANO	CAGLIARI	LANUSEI	SANLURI	CARBONIA	TOTAL
N. "Agritourisms"	82	84	110	117	120	19	36	49	617
N. Checks in "Agritourism"	<b>102</b>	<b>133</b>	<b>220</b>	<b>117</b>	<b>80</b>	<b>19</b>	<b>36</b>	<b>49</b>	<b>756</b>
Non compliances (untraceable products)	0	1	1	0	0	0	0	0	2

Assl	SASSARI	OLBIA	NUORO	ORISTANO	CAGLIARI	LANUSEI	SANLURI	CARBONIA	TOTAL
Restaurants-Banquetting	125	32	59	138	957	72	70	53	1506
Checks on Restaurants-Banquetting	<b>125</b>	<b>97</b>	<b>118</b>	<b>138</b>	<b>540</b>	<b>72</b>	<b>70</b>	<b>53</b>	<b>1213</b>
Non compliances (untraceable products)	0	0	0	0	1	0	0	0	1

# Outbreaks in domestic pigs 2018

## N. 1 - Aritzo, 16 January:

5 heads; 2 dead, 3 sick; origin: contacts with wild boar or free ranging pigs (from Desulo), very poor biosecurity, owner sanctioned;

## N. 2 - Fonni, 12 February:

5 heads, no evidence of clinical signs and found sero+; culled and found PCR+; origin: unknown, poor biosecurity;

## N. 3 – Villagrande Strisaili, 18 May

29 heads; 2 dead; origin: contacts with wild boar, poor biosecurity, owner sanctioned;

## N.4 – Lotzorai (ASSL OGLIASTRA) 8 June

1 head found dead, found PCR+ and outside of the holding

## N.5 - Lotzorai(ASSL OGLIASTRA) 14-15 June

2 heads found dead, found PCR+ and outside of the holding

## N. 6 - Lotzorai(ASSL OGLIASTRA) 19-21 June

1 head found dead, found PCR+ and outside of the holding

## N. 7 Lotzorai (ASSL OGLIASTRA) 19-21 June

2 heads found dead, found PCR+ and outside of the holding

## N. 8 Nuoro (ASSL NUORO) 22 February

79 heads, 10 sick, culled and found immunoblotting +, Origin: illegal introduction of free ranging pigs, owner sanctioned

## N. 9 – Villagrande Strisaili (ASSL Ogliastra), 9 August

10 heads; 0 dead; origin: seropositive animals, poor biosecurity, owner sanctioned

## N. 10 – Mamoiada (ASSL Nuoro), 10-12 September

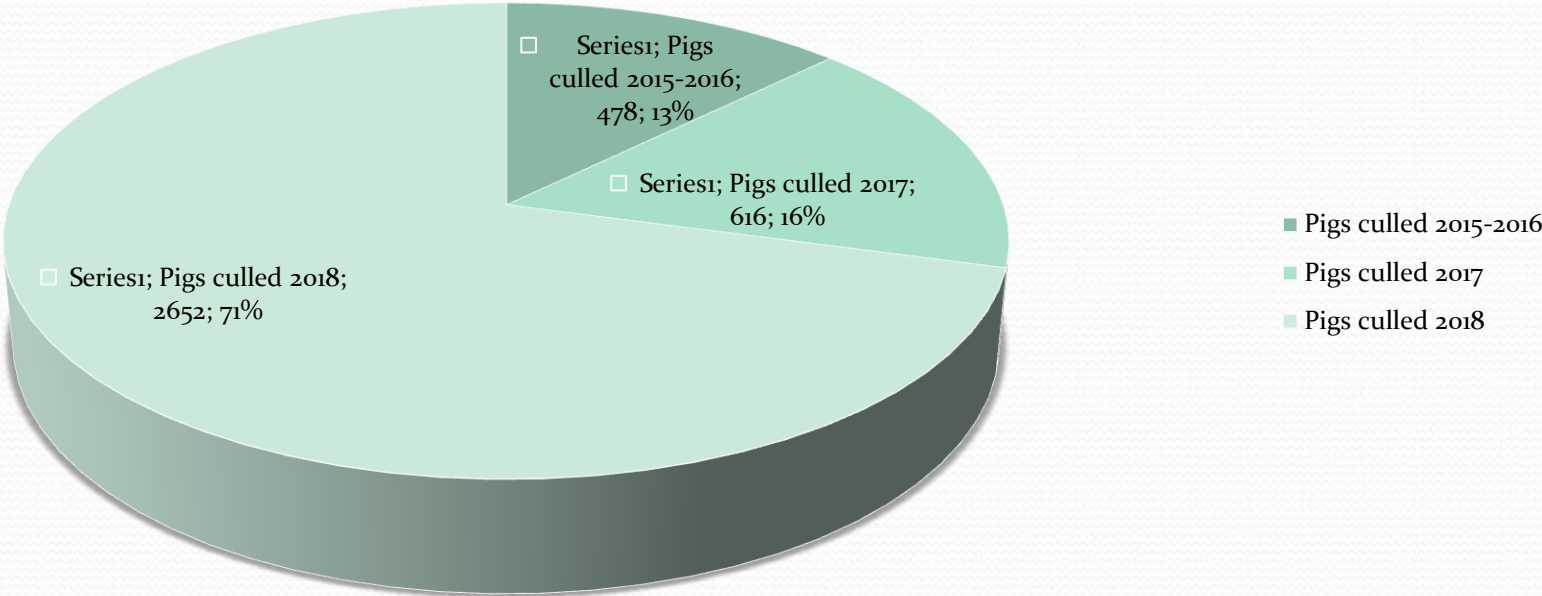
28 heads; 1 dead; origin: unknown, poor biosecurity

# Programme for depopulation of illegal free-ranging pigs

- Free ranging of pigs is forbidden
- More than 500 free-ranging pigs already depopulated in 2016
- Strategy revised and reinforced in 2017
- Almost **3 300** free-ranging pigs depopulated in December 2017/ December 2018
- Free ranging pigs confirmed to be the main ASF virus reservoir and source
- Furthermore, more than 200 pigs also depopulated in holdings with serious non-compliances
- ≈500 free ranging pigs still around
- 7-8 further depopulation actions by February 2019

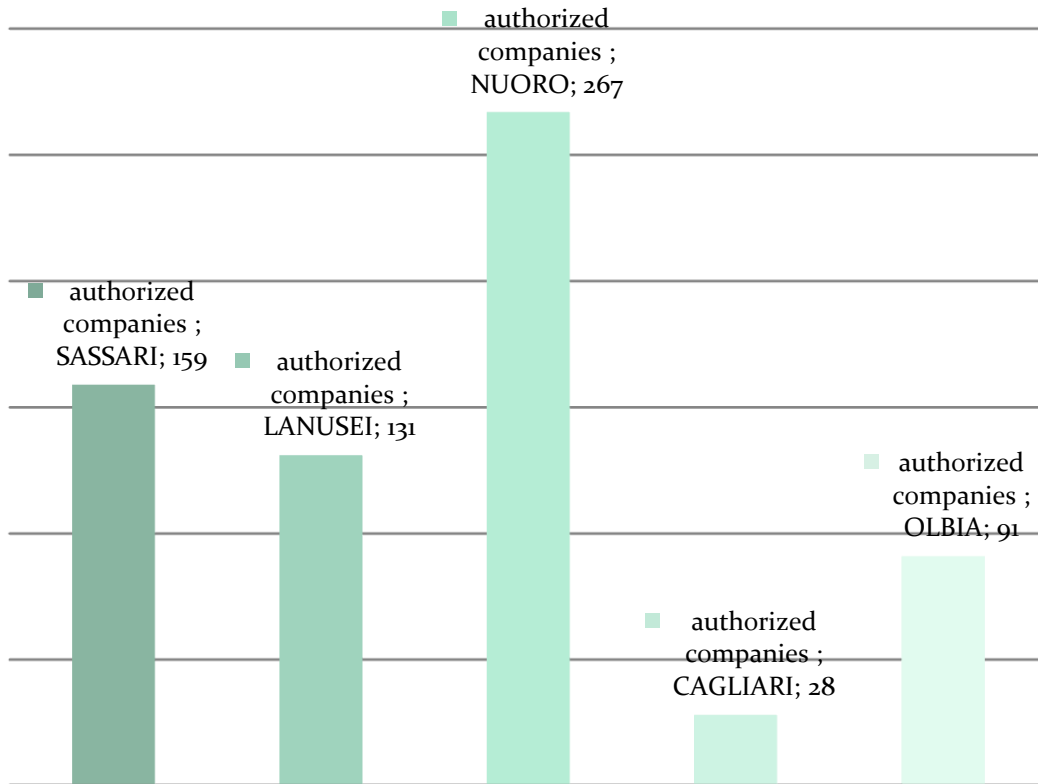
# Culling of free-ranging pigs January-December 2018

<b>Pigs culled 2015-2016</b>	<b>478</b>
<b>Pigs culled 2017</b>	<b>616</b>
<b>Pigs culled 2018</b>	<b>2652</b>
<b>Total</b>	<b>3746</b>



# CONTROLS OF ASF IN THE WILD BOAR

During the **2018-2019 hunting season**, a total of **676 applications for hunting licences** were received and **instructed**. The authorized companies in ASF Infected Area are distributed as follows:



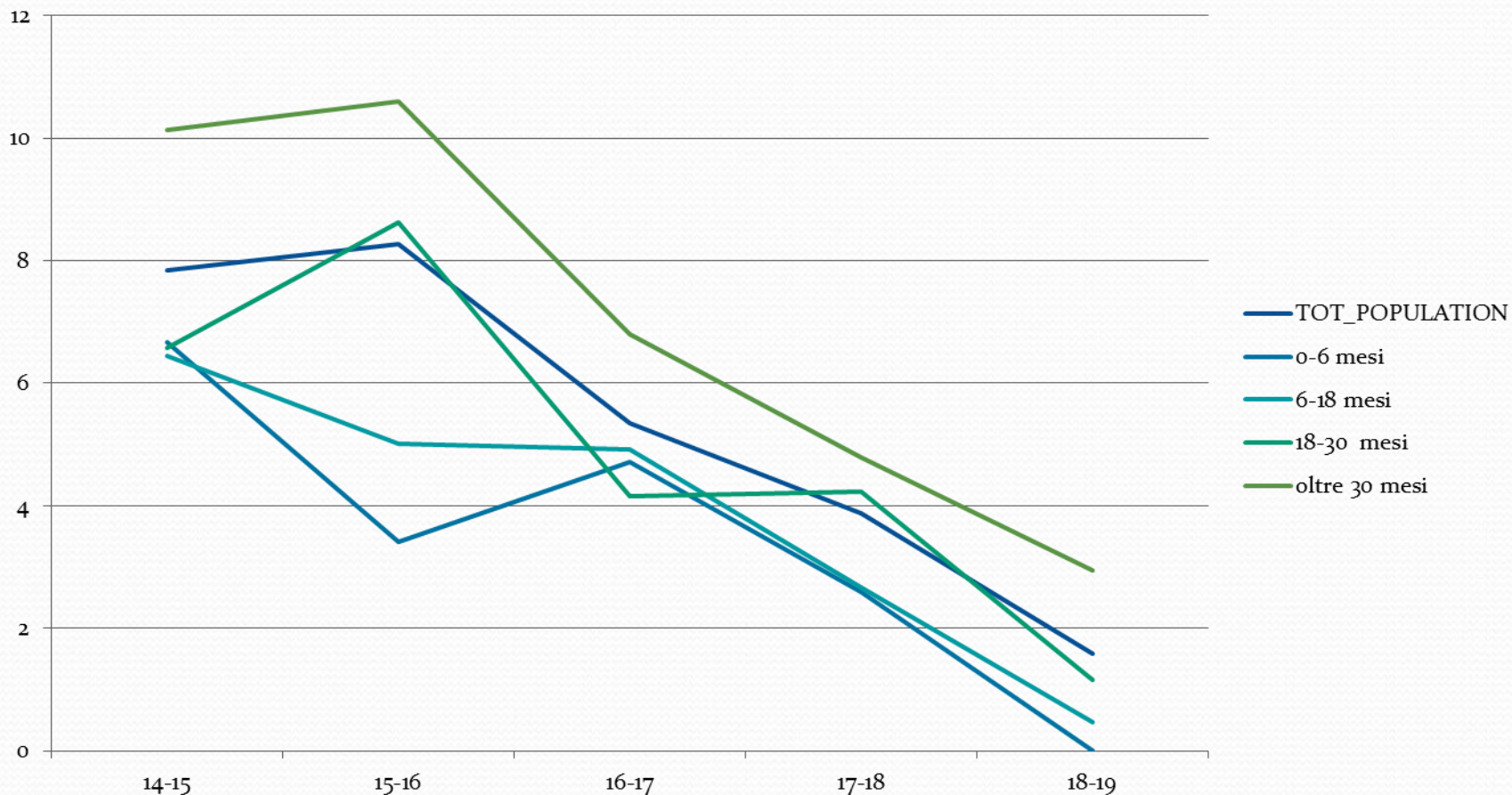


# Evolution of ASF in Sardinia

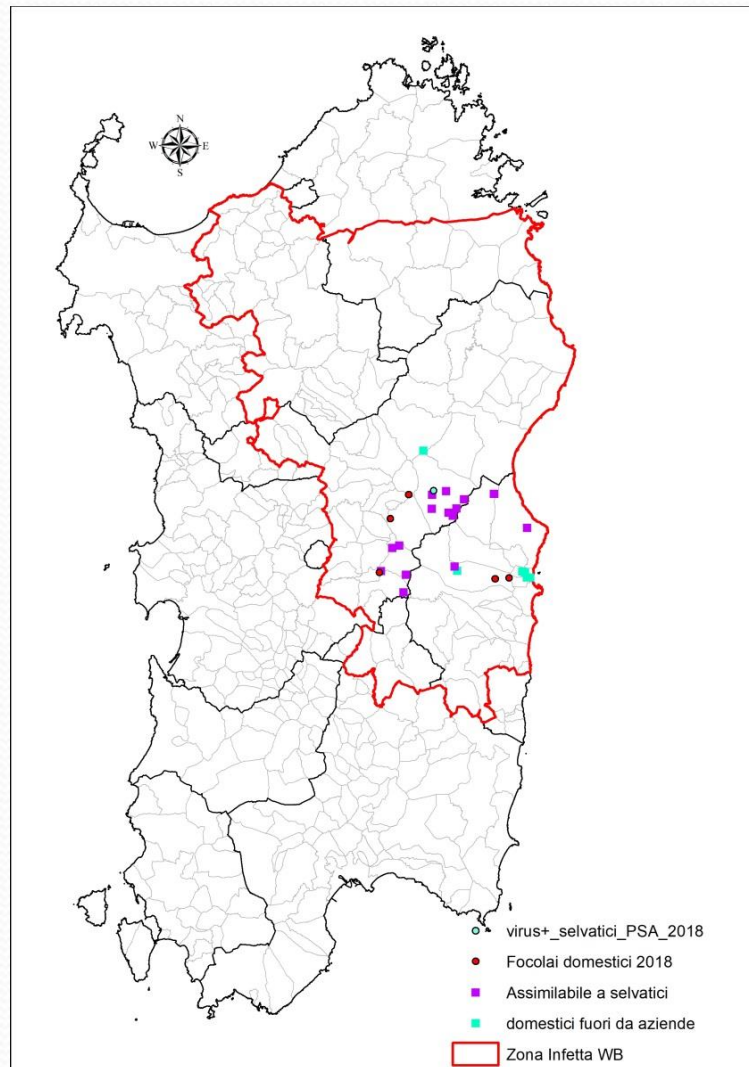
Wild boar				Wild boar				Dom. Pigs	
Passive Surveillance (whole island) and Active Surveillance on hunted wb (infected area) Virology				Active Surveillance on hunted wb (infected area) Serology				Outbreaks (whole island)	
	Tested	Virus+	%		Tested	Siero+	%		
PS 2012	124	19	15,3	PS HS 12/13	3256	340	10,4	2012	74
AS HS	2363	11	0,46						
PS 2013	155	11	7,09	PS HS 13/14	3431	269	7,84	2013	109
AS HS	2047	40	1,95						
PS 2014	155	17	10,9	PS HS 14/15	3676	271	7,37	2014	40
AS HS	1479	9	0,61						
<b>Total</b>	<b>6323</b>	<b>107</b>	<b>1,69</b>		<b>10363</b>	<b>880</b>	<b>8,5</b>		<b>223</b>
<b>December 2014 – Regional Law 34/2014</b>									
<b>Spring 2015 – Start of the new eradication programme by «Unità di Progetto»</b>									
PS 2015	146	1	0,68	PS HS 15/16	3549	240	6,76	2015	16
AS HS	2859	13	0,45						
PS 2016	238	4	1,68	PS HS 16/17	4898	230	4,69	2016	23
AS HS	4106	39	0,065						
PS 2017	218	5	2,29	PS HS 17/18	5202	198	3,81	2017	17
AS HS	5188	24	0,46						
<b>Total</b>	<b>12755</b>	<b>86</b>	<b>0,67</b>		<b>13649</b>	<b>668</b>	<b>4,9</b>		<b>56</b>
<b>As from second semester 2017 – Intensification of veterinary controls by the new single ATS</b>									
<b>As from December 2017 – Massive depopulation of ≈3500 free ranging/irregular pigs</b>									
PS 2018	180	0	0	PS HS 18/19	4216	75	1,77	2018	5
AS HS 18/19	4491	1 (+1)	0,44						
<b>Total</b>	<b>4671</b>	<b>2</b>	<b>0,042</b>		<b>4217</b>	<b>75</b>	<b>1,77</b>		<b>5</b>

# Seroprevalence in wild boar of different age classes

## Hunting Seasons 2014-2019



# ASFV positive findings in 2018



# Conclusions

- In 2018 massive depopulation of free ranging pigs and intensive veterinary controls have lead to a **major improvement in the ASF situation in both domestic pigs and wild boar**
- ASF is currently found only in a few areas of central Sardinia, mostly in the free ranging pigs not culled yet in a few municipalities
- ASFV is most likely unable to persist in the wild boar alone
- Depopulation actions of free ranging pigs will continue in the next months to reduce their number to a negligible number

**Total eradication in 2019/2020 is a realistic objective**