

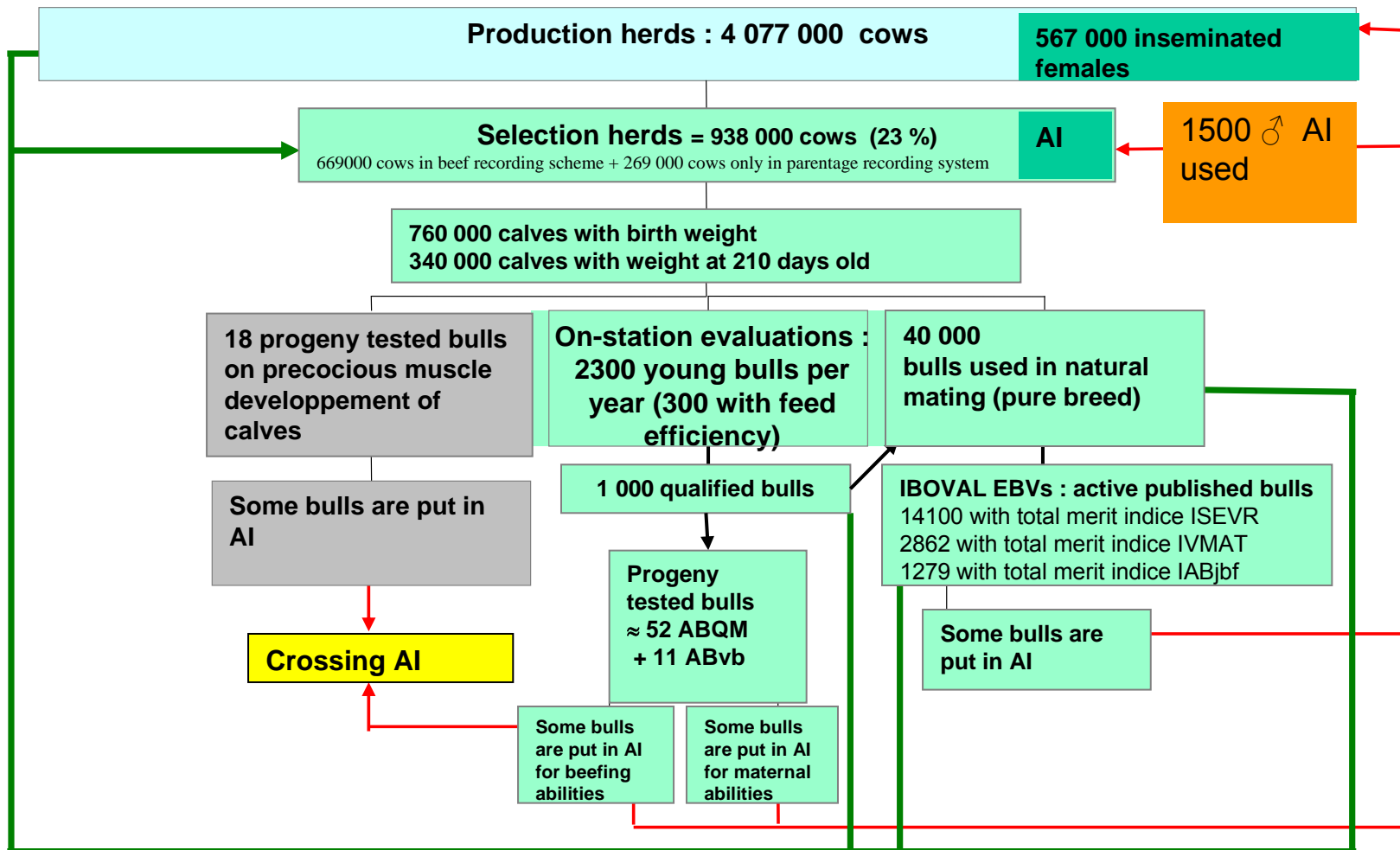


French Report

INTERBEEF WG - May 28th, 2012



Overview of the French beef cattle program



IBOVAL – pre-weaning evaluations (E. Venot)



Traits and EBVs

- Calving ease (maternal effect of calving conditions :AVel) and birth conditions (direct effects of BW and calving conditions : IFNAIS)
- Weaning weight at 210d : direct effect (CRsev), maternal effect (ALait)
- Morphology : muscular development (DMsev), skeletal development (DSsev) and Bone slimness (FOSsev)
- Total merit indices : ISEVR (production) and IVMAT (herd replacement)

What's new ?

- New EBV for Limousine : calving ease (AVel) since 2012
- Evolution of the model for the birth data in Salers
- New chain of calculation : end of automation of the process to product all EBVs
- Bonne slimness (FOSsev) : new EBVs for Blonde d'Aquitaine, Gasconne and Bazadaise in 2013

IBOVAL – post-weaning evaluations (MN Fouilloux)



Traits and EBVs

- Heifer growth (CRpsf): weight at 24 months, BLUP multitraits model with W210d, W12m, W18m and W24m Charolais, Blonde, Maine Anjou (ROU)
- Commercial carcass traits : young bulls at slaughter
Carcass weight and slaughter age in a composite index called ICRCjbf and carcass conformation score (CONFjbf).
Total merit economic index = IABjbf
BLUP multitraits model with weaning traits
Charolais, Maine Anjou, Blonde, Limousine, **Salers** and Parthenaise

What's new ?

- Since 2011 : new database NORMABEV (5 millions carcass data per year)
- More breeds involved : Parthenaise for heifer growth in 2013, Salers for carcass traits since 2012
- Other beef productions considered : a study is started about valorisation of veal production data
- Heifer morphology around 2 years in 2013 : Muscular Development , Skeletal Development , Functional abilities

New EBVs for the French breeders



Productive life

- Preliminary studies have been done :
 - Fertility : first AI success for heifers, and for primiparous
 - Reproductive efficiency : number of calvings at a given age
 - Longevity for hardy breeds

Docility

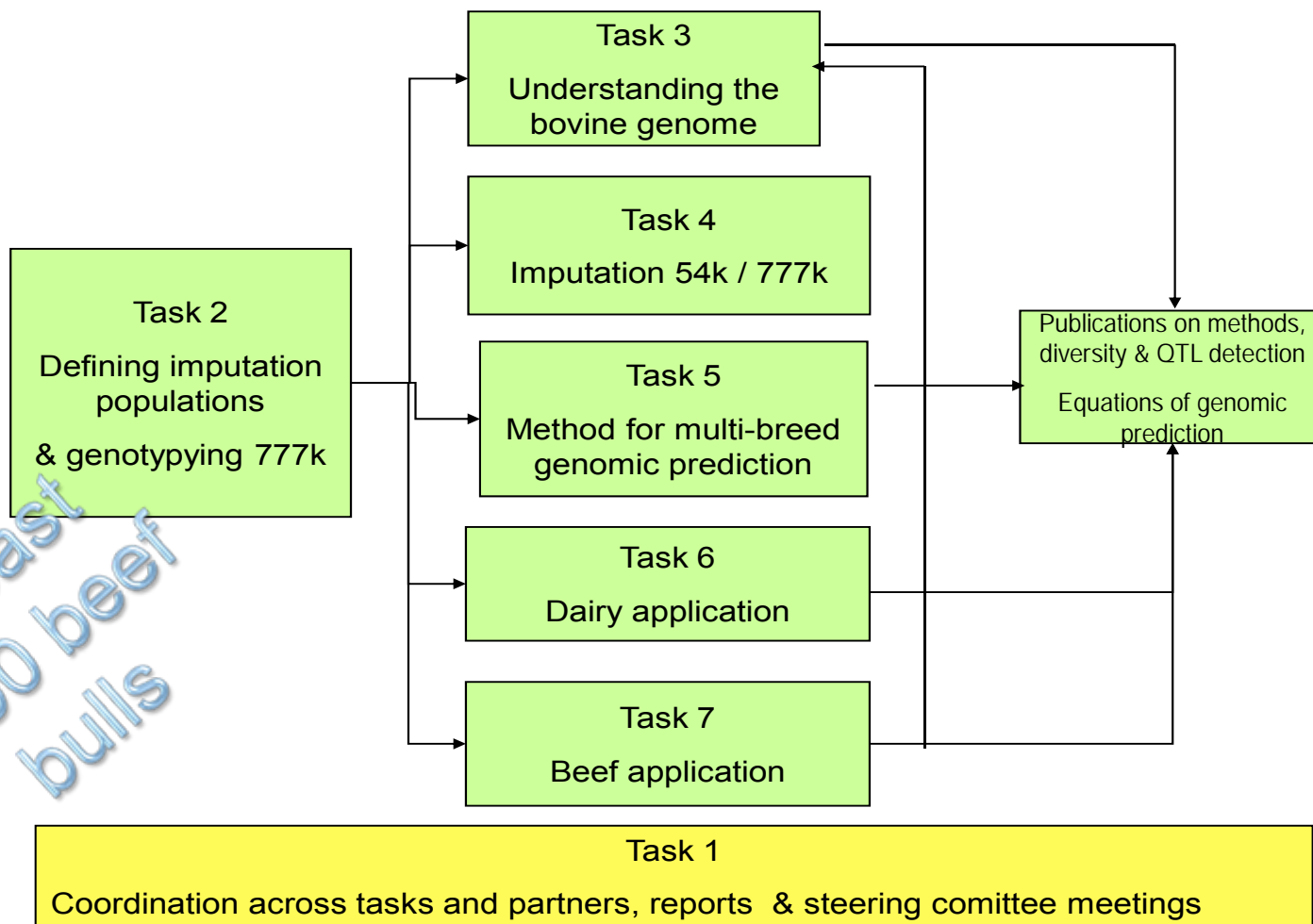
- Two traits : Number of movements during calf weighing and calf behavior towards human during morphological scoring
- More than 120 persons trained to collect during calf weighing and morphological scoring : first collects in 2012



Genomic : the GeMBAL project

- ▶ Constitution of founder populations in order to impute medium density genotypes (54K) into high density (777K) for all the 19 French breeds (beef and dairy cattle)
- ▶ Development of tools, methodology and applications for multi-breed genomic prediction : on all traits recording on farm for cattle
- ▶ Better knowledge of the structure of the bovine genome : characterization of bovine diversity and traces of selection

Genomic : tasks of the GeMBAL project



Numbers of genotypes (777K chip) – task 2



Beef cattle	AUB	SAL	BAZ	LIM	CHA	ROU	PAR	GAS	BLA	TOT
Breeds	14	23	24	34	38	41	71	72	79	
Number of genotypes	254	245	87	447	666	148	299	163	327	2636

Dairy cattle	ABO	RED	BWS	BRE	TAR	SIM	MON	NOR	VOS	FLA	HOL	TOT
Breeds												
Number of genotypes	199	41	99	29	181	124	527	532	53	42	241	2068
+ Eurogenomics											541	