A new, easy way to find the best AI bulls

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NTM is the joint Nordic Total Merit index in Denmark, Finland and Sweden for the red breeds, Holstein and Jersey. Many farmers use NTM as their main breeding tool while some farmers have other criteria when choosing among AI bulls. There is variation among farmers in how much information is needed on the individual bull to make the final selection. NAV has made the work of finding the right bulls easy by showing all available information on all AI bulls with a herdbook number in Denmark, Finland or Sweden in one common web page.

NAV (Nordic Cattle Genetic Evaluation) was founded in 2002 and the development of joint breeding values for bulls and cows in Denmark, Finland and Sweden started. NTM was introduced in 2008. Until now all three countries have had their own search pages for searching and presenting the breeding values for insemination bulls. Now NAV has developed a common search page – NAV Bull Search - for all insemination bulls used in NAV countries. This will be a complement to the national page (in Sweden and Finland) and replace the national page in Denmark.

The principle behind the search page is that you make a search of the bulls that are potentially interesting for you, using a variety of search possibilities, such as breed or birth year, to create top lists based on NTM or other traits. You can look further at individual bulls for the information you need to make the right choice. Thus, you can both get a good overview, and go into more details.

The NAV Bull Search is available in Danish, Finnish, Swedish, English and Russian.

Search for the bulls you want!

There are many search options available for searching the bulls.

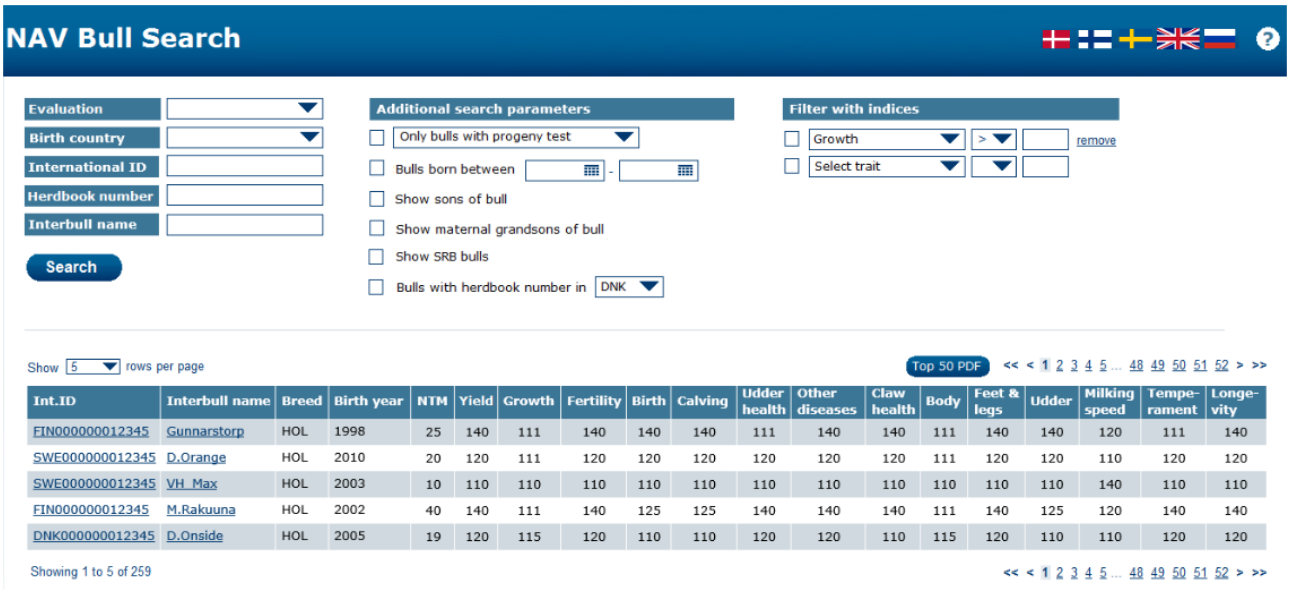
First you have to choose the evaluation on which you want the breeding values for bulls to be shown. NAV calculates breeding values for bulls on four different scales: Red dairy cattle (RDC = Danish Red Cattle, Finnish Ayrshire and Swedish Red Cattle), Holstein (HOL), Jersey (JER) and Red Holstein (RHOL).

Other search criteria are optional. You can search bulls born in Denmark, Finland, Sweden or in other countries. It´s possible to search with bulls ID, herdbook number or name. You can choose to search only bulls that are progeny tested or young bulls that have only genomically enhanced breeding values (GEBV). You can also list bulls born between certain years. Sons or maternal grandsons of a certain bull can be listed as well.

The search result can be filtered according to maximum five breeding values (NTM or sub-indices). This means that you can choose if NTM or a certain sub-index should be higher, equal or lower than a certain value you choose yourself. As an example, you can search for bulls that have yield index over 110 and udder health index over 120.

So, the new NAV Bull Search is very flexible and gives you a lot of search possibilities.

Picture 1. Search page of NAV Bull Search showing the search possibilities and part of the search result. (Preliminary design, nor real breeding values are presented.)



Int.ID	Interbull name	Breed	Birth year	NTM	Yield	Growth	Fertility	Birth	Calving	Udder health	Other diseases	Claw health	Body	Feet & legs	Udder	Milking speed	Tempe-rament	Longe-vity
FIN000000012345	Gunnarstorp	HOL	1998	25	140	111	140	140	140	111	140	140	111	140	140	120	111	140
SWE000000012345	D.Orange	HOL	2010	20	120	111	120	120	120	120	120	120	111	120	120	110	120	120
SWE000000012345	VH Max	HOL	2003	10	110	110	110	110	110	110	110	110	110	110	110	140	110	110
FIN000000012345	M.Rakuuna	HOL	2002	40	140	111	140	125	125	140	140	140	111	140	125	120	140	140
DNK000000012345	D.Onside	HOL	2005	19	120	115	120	110	110	120	120	110	115	120	110	110	120	120

The result is a list of bulls fulfilling the search criteria you have chosen. The list shows bulls ID, name, breed /scale, birth year, NTM and the 14 sub-indices for every bull. You can sort the list on different traits etc. by clicking the headings on the list. By clicking bulls ID or name you go to bulls own page.

Just the information you need on the individual bull

Bulls own page has basic information about the bull including pedigree and breed proportions. Number of daughters and herds are shown for yield, udder health and conformation traits.

As a default only NTM and the 14 sub-indices in NTM (yield, fertility, udder health etc.) are shown. This gives you the most important information and this is often all you need. But if you are more interested you can see more breeding values by clicking the sub-indices. Under every sub-index you see traits that contribute to that sub-index. There are also breeding values that are not included in NTM or the sub-indices under the different trait groups. You can see more information on each breeding value, such as what is included in a certain value and which data it is based on, by holding the mouse over the name of the breeding value.

Picture 2. Bulls own page showing basic information about the bull and all the available breeding values (not all in picture). (Preliminary design, nor real breeding values are presented.)

It´s also possible to see reliabilities, contribution to NTM, type of breeding value and breeding value in previous evaluation for the 14 sub-indices. Contribution to NTM tells how much of the bulls NTM value comes from each of the sub-indices. Index type tells whether the index comes from NAV or Interbull and is the breeding value based on daughter information or only genomic information and pedigree.

On the figure with bars of the breeding values optimums for conformation traits are marked so it is easy to see what the goal in these traits is.

On the search page you can also create a pdf and save or print it.

More information on how to use the NAV Bull Search can be found on the webpage.

Later this year a tool for showing what a bull's breeding value means in average expected phenotypic performance, i.e. kg milk, frequency of mastitis, in his daughters will be implemented to the NAV Bull Search.

You can find the NAV Bull Search from NAVs webpage and it will also be available from national web pages.