jaar	Rivo mlli kg vlees UitGEO+ oem71-90	Eigen extrapol oem71-90	correctie RIVO RIVO	Vlees sept oecorr vlees hele Wadden	Vlees sept ton versoew (vlees / 0.15)	Vlees sept Pr volgens Rivo-meth: Productie 0,48*vers*1,1	Eliminatie Beukema E/m2	Eliminatie Pr volgens Beuk-meth: Pr in ton E/m2*1500	Vlees sept maal factor 0.44 x 'vers' x 0,665454545	Vlees sept maal factor 0.44 x 'vers' x 0,649	Elimi 69-90 Vlees 91-03 maal factor K3 x vers x M6 0,6573	COMBI TON NA VERLIES Over deel 0,44	COMBI M3 NA VERLIES ton * 1.5 0,69	Beuk 69-96 Rivo 96-03 maal factor 0,649				Verhouding tussen volume (incl.) en versoewicht
						oem 69-96		*oem 69-90*	*oem 69-90*			0,78	0,78		m3 na toevoeging aandeel kokkels	Langjarig gemiddelde vanaf 1969	voort-schrijdend gem zonder jaren 80	voort-schrijdend gem 1991-eind	
	78,35	68,825				*262,646*		*145,891*	*145,649*		TON SCHELPEN			0,74					
				10^6 kg klon	10^3 kg ton	10^3 kg ton	q/m2 ?	10^3 kg ton		10^3 kg ton	10^3 kg ton	10^3 kg ton	m3	m3	m3	m3	m3	
1969	40		1	40	266,667	140,800	40	60,000	78,080		**60,000**	45,000	67,500	**91,216**	91,216	91,216	0	1520,27
1970	40		1	40	266,667	140,800	40	60,000	78,080		**60,000**	45,000	67,500	**91,216**	91,216	91,216	0	1520,27
1971	32	33	1	32,0	213,333	112,640	33	49,500	62,464		**49,500**	37,125	55,688	***75,253***	85,895	75,253	0	1520,27
1972	28	30	1	28,0	186,667	98,560	41	61,500	54,656		**61,500**	46,125	69,188	***93,497***	87,796	93,497	0	1520,27
1973	50	47	1	50,0	333,333	176,000	44	66,000	97,600		**66,000**	49,500	74,250	***100,338***	90,304	100,338	0	1520,27
1974	90	93	1	90,0	600,000	316,800	165	247,500	175,680		***247,500***	185,625	278,438	***376,267***	137,965	378,267	0	1520,27
1975	10	10	1	10,0	66,667	35,200	28	42,000	19,520		**42,000**	31,500	47,250	***63,851***	127,377	63,851	0	1520,27
1976	120	117	1	120,0	800,000	422,400	135	202,500	234,240		***202,500***	151,875	227,813	***307,855***	149,937	307,855	0	1520,27
1977	130	125	1	130,0	866,667	457,600	102	153,000	253,760		**153,000**	114,750	172,125	***232,601***	159,122	232,601	0	1520,27
1978	94	93	1	94,0	626,667	330,880	218	327,000	183,488		***327,000***	245,250	367,875	***497,128***	192,922	497,128	0	1520,27
1979	10	9	1	10,0	66,667	35,200	34	51,000	19,520		**51,000**	38,250	57,375	***77,534***	182,432	77,534	0	1520,27
1980	220	220	1	220,0	1,466,667	774,400	146	219,000	429,440		***219,000***	164,250	246,375	***332,939***	194,975	190,961	0	1520,27
1981	210	203	1	210,0	1,400,000	739,200	197	295,500	409,920		***295,500***	221,625	332,438	***449,240***	214,534	19,500	0	1520,27
1982	114	114	1	114,0	760,000	401,280	118	177,000	222,528		***177,000***	132,750	199,125	***269,088***	218,430	73,655	0	1520,27
1983	72	81	1	72,0	480,000	253,440	184	276,000	140,544		***276,000***	207,000	310,500	***419,595***	231,841	101,547	0	1520,27
1984	34	41	1	34,0	226,667	119,680	94	141,000	66,368		***141,000***	105,750	158,625	***214,358***	230,749	50,736	0	1520,27
1985	15	16	1	15,0	100,000	52,800	45	67,500	29,280		***67,500***	50,625	75,938	***102,618***	223,211	69,085	0	1520,27
1986	10	8	1	10,0	66,667	35,200	14	21,000	19,520		***21,000***	15,750	23,625	***31,926***	212,584	11,989	0	1520,27
1987	12	4	1	12,0	80,000	42,240	12	18,000	23,424		***18,000***	13,500	20,250	***27,365***	202,836	35,417	0	1520,27
1988	175	75	1	175,0	1,166,667	616,000	201	301,500	341,600		***301,500***	226,125	339,188	***458,361***	215,612	180,179	0	1520,27
1989	115	35	1	115,0	766,667	404,800	165	247,500	224,480		***247,500***	185,625	278,438	***376,267***	223,263	155,000	0	1520,27
1990	26	22,5	0,79	20,5	136,933	72,301	84	125,610	40,094		***125,610***	94,208	141,311	***190,961***	221,794	116,066	0	1520,27
1991	4,5		1,54	6,9	46,200	24,394	11	***16,170***		***13,195***	**13,361**	9,620	14,430	***19,500***	212,999	108,594	19,500	422,08
1992	40,9		0,64	26,2	174,507	92,140	3	***4,800***		***49,839***	***50,467***	36,336	54,505	***73,655***	207,193	43,988	46,577	422,08
1993	47,485		0,76	36,1	240,591	127,032	26	***38,760***		***68,713***	**69,579**	50,097	75,145	***101,547***	202,967	40,476	64,901	422,08
1994	24,7		0,73	18,0	120,207	63,469	23	***33,945***		***34,331***	**34,764**	25,030	37,545	***50,736***	197,112	155,963	61,360	422,08
1995	34,1		0,72	24,6	163,680	86,423	79	***118,800***		***46,747***	**47,336**	34,082	51,123	***69,085***	192,370	115,836	62,905	422,08
1996	3,8		1,17	4,4	29,640	15,650	6	***8,775***		***8,465***	**8,572**	5,915	8,872	***11,989***	185,928	216,431	54,419	404,49
1997	13,54		0,97	13,1	87,559	46,231				25,007	**25,322**	17,472	26,208	***35,417***	180,738	170,706	51,704	404,49
1998	145,255		0,46	66,8	445,449	235,197				127,220	**128,824**	88,888	133,333	***180,179***	180,719	170,706	67,764	404,49
1999	71,85		0,8	57,5	383,200	202,330				109,442	**110,821**	76,467	114,700	***155,000***	179,890	118,885	77,457	404,49
2000	56,634		0,76	43,0	286,946	151,507				81,952	**82,985**	57,259	85,889	***116,066***	177,895		81,318	404,49
2001	54,42		0,74	40,3	268,472	141,753				76,676	***77,642***	53,573	80,360	***108,594***	175,795		83,797	404,49
2002	21,75		0,75	16,3	108,750	57,420				31,059	**31,451**	21,701	32,551	***43,988***	171,919		80,480	404,49
2003	15,01		1	15,0	100,067	52,835				28,579	**28,939**	19,968	29,952	***40,476***	168,163		77,403	404,49
2004				87,8	585,580	203,586				110,122	**111,519**	76,942	115,413	***155,963***	167,824		83,014	404,49
2005				88,0	583,333	133,760				72,352	**73,264**	57,146	85,719	***115,836***	166,419		85,202	457,25
2006				71,0	473,333	249,920				135,184	**136,888**	106,773	160,159	***216,431***	167,735		93,404	457,25
2007	Origineel bestand van			56,0	373,333	197,120				106,624	**107,968**	84,215	126,323	***170,706***	167,811		97,951	457,25
2008	t/m 2009. maar met enkele routes.			56,0	373,333	197,120				106,624	**107,968**	84,215	126,323	***170,706***	167,884		101,993	457,25
2009				39,0	260,000	137,280				74,256	**75,192**	58,650	87,975	***118,885***	166,689		102,882	457,25
2010	N.B. Versoewicht is direct uit rapport Imares			26,0	173,3						**50,176**	39,137	58,706	***79,333***	164,609		101,705	457,25
2011	bekend in milioen kg. Imares rekent			23,5	156,5						***45,260***	35,303	52,954	***71,559***	162,445		100,269	457,25
2012	versoewicht om naar vleesgewicht.			106,6	712,1						***205,939***	160,633	240,949	***325,607***	166,153		110,512	457,25
2013	Dit is toegepast vanaf 2010			94,2	627,7						**181,531**	141,594	212,391	***287,015***	168,839		118,186	457,25
2014	**Prognose is gebaseerd op gemiddelde**			69,1	460,7						**133,234**	103,923	155,884	***210,654***	169,748		122,039	457,25
2015	**voor de periode 1991-heden**			66,8	445,6						**128,868**	100,517	150,775	***203,750***	170,471		125,307	457,25
2016				58,8	391,9						**113,337**	88,403	132,605	***179,196***	170,653		127,380	457,25
2017	Vanaf 2015 ook alternative prognose			39,2	261,1						**75,510**	58,898	88,347	***119,388***	169,607		127,084	457,25
2018	onderzocht op basis van trend			12,3	82,0						**23,714**	18,497	27,746	***37,494***	166,965		123,884	457,25
2019	zie werkblad Analyse trend			45,3	301,8						**87,281**	68,079	102,118	***137,998***	166,397		124,371	457,25
2020				17,4	116,3						**33,634**	26,234	39,352	***53,178***	164,219		121,998	457,25
2021				21,2	141,4						**40,893**	31,896	47,845	***64,655***	162,341		120,148	457,25
2022				13,2	88,1						***25,479***	19,873	29,810	***40,284***	160,080		117,652	457,25
2023				40,0	266,7						***77,116***	60,150	90,226	***121,926***	159,387		117,782	457,25
2024				40,0	266,7						***77,116***	60,150	90,226	***121,926***	158,718		117,904	457,25
2025				40,0	266,7						***77,116***	60,150	90,226	***121,926***	158,072		118,019	457,25
2026				40,0	266,7						***77,116***	60,150	90,226	***121,926***	157,449		118,127	457,25
2027				40,0	266,7						***77,116***	60,150	90,226	***121,926***	156,847		118,230	457,25
2028				40,0	266,7						***77,116***	60,150	90,226	***121,926***	156,265		118,327	457,25
										Gemiddeldes =>	**104,135**	**78,301**	**117,451**	**158,718**				

5.1.2.6

Scheiskalkproductie = factor * versoewicht				
Test met diverse factor waarden (2012)				
457	457,2	457,3	457,25	
325,430	325,572	325,643	325,608	
-177	-35	37	1	
-0,05%	-0,01%	0,01%	0,00%	
Prognose met trend, hieronder				

kolom S wikt van kolom P vanwege verschillen in rekenmethode voor verschillende perioden

Gemiddelde over periode 1991-1997:	18,5	123,2 mlli kg !!
Gemiddelde over periode 1991-2012:	38,3	255,3 2.1
Gemiddelde over periode 1991-2015:	42,9	286,0 2.3
Gemiddelde over periode 1991-2018:	42,2	281,6 2.3
Gemiddelde over periode 1991-2020:	41,5	276,8 2.2
Gemiddeld hele priode 71-03	57,4	382,825
Gemiddeld 71-79	62,7	417,778
Gemiddeld 80-89	97,7	651,333
Gemiddelde 90-03	27,8	185,157
Gemiddeld 69-96		

		gem 90-96	*gem 90-96*
		36875	*36882*
		133333	
		176400	
			53940
82		122531	
getal goed			

Kalkproductie
gem 69-12 **109860**

m3 beschikbare productie	
gem 69-18	**166.965**
Gemiddeld 69-79	**182.432**
Gemiddeld 80-89	**268.176**
Gemiddelde 90-15	**127.832**
Gemiddeld 80-89 - 40%	160.905
137587	
getal goed	

60% is 160905,405

748

NIOZ vers	RIVO vers
10	6
10	22
20	28
120	95
160	110
220	180
260	240
170	275
160	330
290	360
500	175
550	130
600	95

Zie figuur in werkblad Relatie NIOZ-RIVO

1,5	0,9
1,5	3,3
3	4,2
18	14,25
24	16,5
33	27
39	36
25,5	41,25
24	49,5
43,5	54
75	26,25
82,5	19,5
90	14,25

Prtoductieberekening bij verschillende wintersterftes
Sterfte 's zomers 0.28

Wintersterfte	Tot sterfte	Productie	Resterende productie na aftrek 25%
40	56,8	68	51
45	60,4	70	53
50	64	73	55
55	67,6	76	57
60	71,2	78	59
65	74,8	81	61
70	78,4	84	63
75	82	87	65
80	85,6	89	67
85	89,2	92	69
90	92,8	95	71
95	96,4	97	73