

Not a bad year as such, but everything was down a bit compared to last year's sizzler.

Millennial hopes and hypes notwithstanding, 1999 was no record-breaker.

True, the statistic for total new lifts in North America was essentially unchanged from last year (down by just one to 63), but some of the trendlines skidded. The first shocker was that, after countless years of annual increases in the average size (VTFH) of new lifts, we had a 20 percent drop from 2,597 to 2,075. Clearly, last year's crop of huge installations in the Mountain and Pacific states (capped by Squaw Valley's funitel with 7,024) was not to be repeated. Even so, the drop is surprising in the face of some huge lifts, such as the monster detachable quad, complete with bubble, at Whistler/Black-

comb and the existence of another six in the clite 4,000-plus VTFH.

For the record, VTFH is calculated by multiplying the lift's vertical in feet by the capacity in passengers-per-hour. At SAM, we divide the result by 1,000, making it a measurement of the number of people a lift can transport 1,000 vertical feet in an hour. This index is a good measure both of the work performed by the lift, as well as a sensitive gauge of investment costs.

The East (+3), Midwest (+1) and the Mountain states (+4) all recorded increases in new lifts, while Canada had a drop of two and the Pacific states a substantial drop of seven. But this hardly gives

the complete picture that is contained in the regional breakdown by VTFH. Thus, we see the East surging by 73 percent to 33,695 and the Midwest exactly doubling to 4,373. A surprise. Fueling the East's high numbers were no less than four installations in the 4,000-plus VTFH range. Last year there were none.

At the same time, the Mountain states dropped 25 percent in VTFH, with the Pacific states suffering a 67 percent drop and Canada 23 percent.

Quads and Six-packs

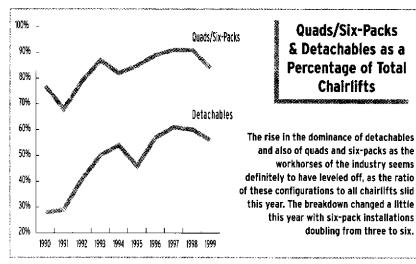
Did quads and six-packs continue their dominance of all chairlifts installed—at 91 percent for the past two years? The

mnarican with Dracading Vaars

New Lifts by Region Lift							Lift Comparison with Preceding Years									
Region	New VTFH	Surface	Chair	Gondolas/ Trams	Total	Region	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
East	33,695	_	11	2	13	East	8	10	6	5	15	13	11	12	10	13
Midwest	4,373	-	4	-	4	Midwest	4	6	3	3	1	4	1	10	3	4
Mountain	52.591	-	25	-	25	Mountain	16	9	11	13	13	12	24	24	21	25
Pacific	17.952	-	9	1	10	Pacific	2	5	9	9	9	5	10	9	17	10
Canada	22,142	-	10	1	11	Canada	25	18	7	11	13	7	7	6	13	11
Totals	130,753	0	59	4	63	Totals	55	48	36	41	51	41	53	61	64	63

New Lifts by Manufacturer				VIFA Comparison with Preceding rears												
Manufacturer	Surface	Çhair	Gondolas/ Trams	Total lifts	Total VTFH	Region	1990	1991	1992	1993	1994	1995	1996	1997	1998	199
Doppelmayr	-	12	3	15	39,581	East	14,823	19,775	9,129	10,438	31,603	31,781	15,890	32,123	19,453	33,69
Garaventa CTEC	_	23	-	23	41,600	Midwest	2,779	3,624	3,083	1,556	866	1,069	95	5,929	2,185	4,37
Leitner	_	4	-	4	11,232	Mountain	40,480								69,922	
Partek	_	2	-	2	1,691	Pacific	4,972				22,645					
Poma	-	13	1	14	31,245	Canada	30,762	33,821	16,420	10,856	24,034	15,430	16,444	15,232	28,265	22,14
Riblet	-	5	-	5	5,404											
Totals	0	59	4	63	130,753	Totals	93,816	88,644	76,588	75,001	107,955	79,872	120,173	146,571	166,182	130,75

East		lı	nstalle	1	() () () () ()			VTFH
Location	Туре	Manufacturer	HP	Length	Vert.	Cap.	Speed	(000)
MASSACHUSETTS Wachusett Mtn.	4C-Det.	Doppelmayr	400	3516	600	2600	1000	1560
NEW HAMPSHIRE								
Bretton Woods Cannon Mtn.	4C 4C-Det.	Garaventa CTEC Garaventa CTEC	250	3752	830	1800	450	1494
Cannon Mtn.	4C-Det. 3C	Garaventa CTEC	600 30	5251 790	1318 105	2400 1400	1000 350	3163 147
NEW YORK	•	odiaventa urzo	-	.,,	100	1100	555	
Belleayre Mtn.	4C	Garaventa CTEC	400	5030	1138	2400	450	2731
Belleayre Mtn.	4C	Garaventa CTEC	400	3635	945	2400	450	2268
Bristol Mtn.	4C-Det.	Garaventa CTEC	500	4103	1106	2400	1000	2654
Gore Mtn. Whiteface Mtn.	Gondola (8)	Poma	900	7208	1703	2400	1100	4087
	Gondola (8)	Doppelmayr	1200	8487	2432	2000	1212	4864
PENNSYLVANIA Jack Frost	2C*	Partek	100	2702	526	1200	450	631
VERMONT	20	T di ten	100	LIVE	JLV	ILOU	700	001
Jay Peak	4C-Det.	Leitner	1000	7350	1620	2600	1100	4212
Stratton Mtn.	6C-Det.	Garaventa CTEC	900	4620	1340	3600	1100	4824
VIRGINIA								
Wintergreen	4C	Partek	150	1672	530	2000	400	1060
MidVest				* ** *				
MINNESOTA								
Welch Village	4C	Riblet	100	1623	291	2000	425	582
OHIO			100	.025		2550	120	DUL
Mad River Mtn.	4C	Riblet	100	1477	291	2000	380	582
SOUTH DAKOTA								
Terry Peak	4C-Det.	Doppelmayr	500	4063	1040	2500	1000	2600
WISCONSIN								
Alpine Valley	4C-Det.	Poma	200	1426	290	2100	900	609
						No. of the		
COLORADO		_						
Aspen Highlands Breckenridge	4C-Det. 6C-Det.	Poma Poma	400	4743	1116	1200	1100	1339
Monarch	6C-Det. 4C	Garaventa CTEC	700 300	5577 3630	632 805	3600 2400	1100 450	2275 1932
Silver Creek	4C-Det.	Leitner	500	4360	840	2400	1100	2016
Telluride	4C-Det.	Doppelmayr	700	6254	1244	2800	1000	3483
Telluride	4C-Det.	Doppelmayr	500	4912	936	2400	1000	2246
Vail	4C-Det.	Poma	900	6704	1665	2000	1100	3330
Vail	4C-Det.	Poma	900	8391	1924	1800	1100	3463
Vail Winter Park	4C-Det. 4C-Det.	Poma Poma	500 600	4834 4637	1357	1200	1100	1628
Wolf Creek	4C-Det. 4C	Garaventa CTEC	400	4037 5215	1243 1101	2400 1800	1100 475	2983 1982
IDAHO	.=	23.0.0.10 0120	100	OLIU	1141	1000	710	170L
Bogus Basin	4C-Det.	Doppelmayr	700	5302	1792	2400	1000	4301
MONTANA					· · · -			
Bridger Bowl	3C	Garaventa CTEC	30	401	40	1000	300	40
Yellowstone Mtn. Club	4C-Det.	Doppelmayr	600	6016	1330	2000	1000	2660



answer is No. The percentage dropped to 83 percent. Detachables as a percentage of total chairs also dropped a tad—from 59 to 56 percent.

Does any of this presage a trend or is it an anomaly? Probably neither. Rather, 1998 was probably the anomaly and 1999 more in the mainstream of what happened in the previous three years. For instance, last year there were no less than eight new gondolas or trams, but this year's total of four is more in keeping with 1997 (3), 1996 (4) and 1995 (1). All this year's gondolas are 8-passenger. Two of them feature CWA cabins and the other two Gangloff.

A subset of these figures is that sixpacks doubled from three to six. One of the five that Poma installed marks a passing: it replaces the 1981 Quicksilver quad at Breckenridge—the dawn of the detachable chair movement that the public embraced so enthusiastically. That historic Doppelmayr, featured on a SAM cover in 1982, lives on in its new home at Owl's Head in Quebec. The new Quicksilver is also an innovator: it is the first North American installation to use the new Double Loading System (DLS). There are four European lifts with this breakthrough technology.

The "Bia Four"

We have been keeping track of the impact of the "big four" (American Skiing Co., Booth Creek Holdings, Intrawest and Vail Resorts). Interesting. Two years ago, their combined lift purchases accounted for 43.3 percent of total new VTFH; last year that had dipped to 37.8 percent and this year the slide continues to 21.6 percent.

The numbers in any one year for any of these companies are not significant, but one can make the unsurprising case for a correlation between the annual reports of the three publicly traded companies and their lift purchases.

Intrawest repeated as the biggest lift purchaser, accounting for 12 percent of the total new VTFH. That's down from 17 percent last year. Vail Resorts went from one to four new lifts and eight percent of the total, while ASC dropped from six to one and just 1.3 percent of the total. Booth Creek went from three lifts in 1998 to none this year.

Sharing the Business

How did the lift suppliers do? Of the

international big four (Doppelmayr, Garaventa/CTEC, Leitner and Poma), only Poma saw a modest gain. On the positive side, it was interesting to see the venerable Riblet rebounding from last year's zero to five new lifts this year. We also note the detachable quad at Jay Peak, Vt., is the first in the East for Leitner.

What else to note? Last year, the Midwest got its first detachable; this year it added two more. Impressive.

As always, there are some interesting installations, starting with Doppelmayr's pulse gondola at Panorama, B.C. This configuration is not uncommon in Europe, but this side of the Atlantic it is something of a rarity.

Other Lifts

Conveyor lifts continue strong, but at 24 new installations, down from last year's 39. It is hard to get complete numbers on handle tows and tubing tows, but they seem to be down by more than 40 percent. Special significance? Probably not, but rather a case of the same set of economics and snow-year realities that determine gondola and detachable sales.

Incidentally, this is the second year in a row—and historically, the *only* two years—that no new surface lifts have been recorded.

Finally, we note that SAM's 38 years of reporting on lift construction continues to adhere to a rather strict definition of what "new" means. As such, the total investment in uphill transportation in any year includes a lot of lift relocations, reengineerings and other upgrading that we do not include in our totals. To the skiers and boarders we all work for, these are often "new" lifts.

And that's great!

Mountain ce								
Location	T		nstalle					VTF
	Туре	Manufacturer	HP	Length			Speed	
Alta	3C-Det.	Garaventa CTEC	400	4730	810	1800	800	1458
UTAH								
Deer Valley	4C-Det.	Garaventa CTEC	800	6610	1398	2800	1000	3914
Deer Valley	4C	Garaventa CTEC	150	1720	279	2800	375	781
Portal Vistas**	4C	Garaventa CTEC	75	2096	813	500	250	
Powder Mtn.	4C	Garaventa CTEC	400	5770	1615	1550	475	2503
Rustler Lodge	3C	Garaventa CTEC	25	434	85	600	300	51
Snowbird	4C-Det.	Garaventa CTEC	500	3515	1435	2200	1000	3157
The Canyons	_4C	Garaventa CTEC	250	2815	1028	1700	465	1748
Utah Winter Sports Park	20	Garaventa CTEC	40	1210	461	550	450	254
WYOMING								
Jackson Hole	4C-Det.	Poma	800	5097	1748	2000	1000	3496
White Pine	3C	Garaventa CTEC	250	4403	913	1500	450	1370
White Pine	3C	Garaventa CTEC	50	1215	181	1000	400	181
								(a) (a) (a)
Paglic .				100				
CALIFORNIA						an and the		2.363%
Mammoth Mountain	4C-Det.	Doppelmayr	200	1875	556	2400	1000	1334
Mammoth Mountain	Gondola (8)	Doppelmayr	500	3875	717	2400	1200	1721
Mountain High	4C-Det.	Doppelmayr	500	3500	994	2800	1000	2783
Squaw Valley	6C-Det.	Poma	500	3068	564	2400	1000	1354
Squaw Valley	6C-Det.	Poma	800	5441	1756	2000	1100	3512
Sugar Bowl	4C-Det.	Garaventa CTEC	500	3505	1015	2800	1000	2842
Sugar Bowl	4C	Garaventa CTEC	40	673	B3	2000	400	166
OREGON				5.5			100	
Anthony Lakes	3C	Riblet	200	3201	800	1800	450	1440
Hoodoo	4C	Riblet	200	2127	695	2200	450 450	1529
WASHINGTON	19	MUICE	4.00	LILI	U23	2200	4 JŲ	1327
WASHINGTON Stevens Pass	3C	Diblot	100	1519	707	1000	425	1071
orevella Laga	3C	Riblet	150	1513	706	1800	425	1271
Camada								
ALBERTA								
Banff-Norquay	4C	Leitner	150	1610	360	1700	450	612
BRITISH COLUMBIA								
Kimberley	4C-Det.	Leitner	1000	7800	1830	2400	1100	4392
Panorama	Gondola (8) Pulse	Doppelmayr	161	710	130	870	590	113
Whistler/Blackcomb	4C-Det.***	Doppelmayr	800	5814	1129	2650	1000	2992
Whistler/Blackcomb	4C-Det.	Doppelmayr	1080	7113	2175	2800	1000	6090
ONTARIO								
Alpine Ski Club	4C	Doppelmayr	200	2162	535	2400	450	1284
Rius Mountain	AC-Dot	Doppennayi Doma	400	25.42	404	2000	UD4	1/101

Mont Blanc

* Dual Double

Blue Mountain

Blue Mountain

Mount St. Lauis

Craigleith Ski Club

Not included in lift totals.

6C-Det.

4C-Det.

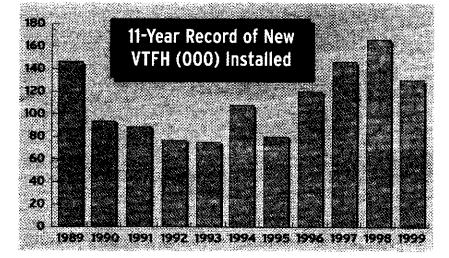
6C-Det.

30

4C

*** Bubble

QUEBEC



14

Handle Tows/Wire Rope Tows*									
Borer	5	Liftram	1						
Brückschlögl	4	Multi Skilift	14						
Harusch	10	Schippers	6						
Leitner	4	TOTAL	44						

400

75

400

300

300

2543

853

3352

2343

2723

604 2800

164 1620

693 2800

404 3000

646 2400

984

394

1070

984

450

1691

266

1940

1212

1550

Poma

Poma

Poma

Garaventa CTEC

Doppelmayr

Conveyors*		
Barrie Welding 1	Magic Carpet	9
Brückschlögl/Sunkid 14	TOTAL	24

*Not included in lift statistics.