

the thickness of ice for tennis courts before skating is permitted varied from 1 to 4 inches (average 2 inches); for playgrounds, 1 to 3 inches (average  $1\frac{1}{2}$ ). It was stated that ice should be maintained by spraying to remove cracks and bumps.

#### Removing Water from Areas

The executives reported drainage from outlets, dams and valves, and natural drainage and evaporation.

#### Difficulties

Flooding. In the lack of cold weather (when the ground is not solidly frozen) the water may seep through the ground. This would indicate precaution in determining proper ground and temperature conditions before flooding.

Spraying. The difficulties with spraying seem to be mainly in regard to temperature--as one superintendent said, "One warm day can undo three nights' work." All agreed that something must be done to prevent skaters from using the ice while it is soft or before it is sufficiently thick. Rough surfaces result from this practice. Attendants are necessary or the area must be fenced.

#### Resultant Damage to Areas

The executives were unanimously agreed that flooding playfields does no damage to the ground, whether turf or soil.

In most cases there was no harm done to tennis courts. Exceptions: Water sometimes seeps under concrete courts, causing cracks in the concrete. The problem is to close the expansion joints. One official reported that, in addition to delayed opening of clay courts for regular use in the spring, they required more work after they had been converted into ice skating rinks.

#### Advice from the Executives

If possible, the rink should be in a sheltered place. If it can be sheltered from the sun, the ice stays in better condition. When feasible, permanent curbing should be constructed. One executive suggested that there will be 75% more skating at night than during the day if lights are installed. On the other hand, do not allow night skating unless the area is well lighted.

---

This is a pertinent question, for even those who reported unsuccessful attempts in creating ice skating rinks want to continue experimenting. Because of widespread interest, the Association hopes to follow up this preliminary questionnaire with more complete information. Executives are urgently requested to submit to the Association their experiences in the preparation, construction, and maintenance of ice skating areas in order that more detailed information may be made available.